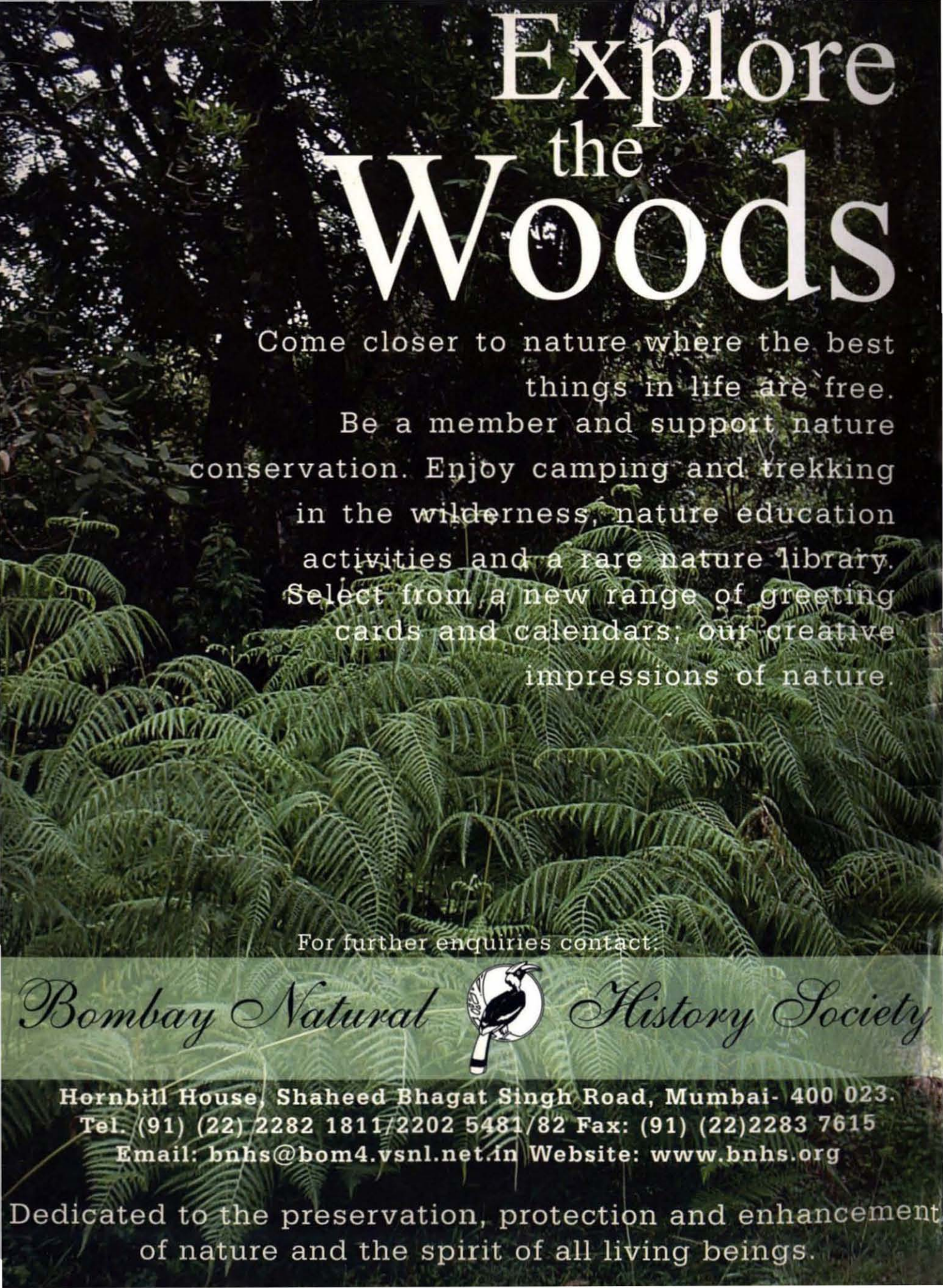
HORNBILL

DISCOVER THE LIVING WORLD

OCTOBER-DECEMBER, 2004

BOMBAY NATURAL HISTORY SOCIETY

BIRD SPECIAL


Explore the Woods
Come closer to nature where the best things in life are free.
Be a member and support nature conservation. Enjoy camping and trekking in the wilderness, nature education activities and a rare nature library.
Select from a new range of greeting cards and calendars; our creative impressions of nature.
For further enquiries contact:
Bombay Natural History Society
Hornbill House, Shaheed Bhagat Singh Road, Mumbai- 400 023.
Tel. (91) (22) 2282 1811/2202 5481/82 Fax: (91) (22)2283 7615
Email: bnhs@bom4.vsnl.net.in Website: www.bnhs.org
Dedicated to the preservation, protection and enhancement of nature and the spirit of all living beings.

HORNBILL

October-December, 2004

Published and printed quarterly by Rachel Reuben for the Bombay Natural History Society, Printed at Stusa Mudra Pvt. Ltd., Lower Parel, Mumbai.
Reg. No. RN 35749/79, ISSN 0441-2370.

For more information on the Society and its activities, write to the Honorary Secretary, Bombay Natural History Society, Dr. Sálim Ali Chowk, S.B. Singh Road, Mumbai 400 023, Maharashtra, India.
Tel.: (91-22) 2282 1811
Fax: (91-22) 2283 7615
E-mail: bnhs@bom4.vsnl.net.in
Website: www.bnhs.org

CONTENTS


NAYAN KHANOLKAR

Jehangir's Laila Majnu

Emperor Jehangir, who ruled the Moghul Empire in India in the 17th Century, was so fascinated by the marital fidelity of the pair of sarus cranes he had that he named them Laila and Majnu, the inseparable lovers of Persian poetry. Jehangir writes of several instances of the deep pair bond of the sarus. In fact, it is an Indian tradition that the sarus pair are protected by the belief that if one of a pair is killed its mate would pine and die. The sarus has thus been conserved through the centuries. Unfortunately, though the tradition still exists, habitat loss to agriculture spells doom for the sarus in the coming years. K.S. Gopi Sundar of the Wildlife Institute of India, who has done extensive studies on the ecology of this magnificent crane, the tallest flying bird in the world and the epitome of marital fidelity to Indians, believes that the sarus may not survive the current century if concerted efforts are not made to conserve natural wetlands, essential for the survival of the species. As of today, the sarus Is well on the way to being history, just like the Emperor to whom it was the wings of love.

J.C. Daniel

This bird also inhabits the sub-tropical evergreen forests of the Himalayas, extending eastwards into Assam and thence south into Myanmar and the Malay Peninsula.

BIRDING IN TRAVANCORE

Stray Impressions of a Rambling Ornithologist

Text: **Sálim Ali**
Photographs: **N.A. Naseer**

The doyen of Indian ornithology, Sálim Ali had a long and active association with the BNHS.

N.A. Naseer is a life member of the Society and a very keen wildlife photographer.

It has lately fallen to my lot to wander about the mighty jungles of Travancore in South India in the fascinating pursuit of bird-watching and collecting.

Few people, even in India, have any but the haziest notions of Travancore which for natural variety and charm can vie with the most celebrated beauty spots of our land.

In the matter of its bird-life Travancore bears a curious similarity to that of the hilly portions of Sri Lanka on the one hand and to Tenasserim and the Malay Peninsula on the other. It has, moreover, many striking parallels with the Himalayas which are not merely confined to the bird-life, but as one might expect extend further to geology, vegetation and animal life in general.

I certainly think that one of the most striking and grotesque characters in Travancore Bird-land is the great Indian hornbill. This bird also inhabits the sub-tropical evergreen forests of the Himalayas, extending eastwards into Assam and thence south into Myanmar and the Malay Peninsula. February and March is the time the hornbill goes a-wooing, and his courtship antics and family life are in no way less remarkable than his person.

We were camped at Kumili on the banks of the lovely Periyar Lake in North Travancore, which irrigates the waving emerald rice fields of the plains country, beyond the eastern borders of Travancore State. The lake is formed by the damming up of the Periyar river near its source among the Cardamom Hills and lies at an elevation of something like 3,000 feet above sea level. The dense evergreen forest covering the ravines and valleys has become submerged, and all over this area one can see the gaunt trunks of the forest giants standing out of the water with haggard arms outstretched to Heaven as if to arraign the despoilers of their pristine home and solitude.

The country around the Periyar Lake consists of bare hilltops, covered with a sort of tall coarse grass, interspersed with occasional stunted date palms of straggly 'Nelli' (*Phyllanthus*) trees. Here and there among them, especially in the ravines, are patches of typical evergreen jungle. Owing to the perennial water supply and the cover afforded by these jungle patches, the environs of the lake are full of bison, elephants and other game, and have lately been selected by the government for the formation of a Game Sanctuary.

The patches of evergreen forest, locally known as *sholas*, provide just the type of country suited to the hornbill's domestic requirements. During our first few days at this camp, several solitary male hornbills were now and again observed winging their way laboriously from one *shola* to another with the familiar rasping noise that accompanies their flight. This fact strongly suggested that the birds had mates busy with family cares in the neighbourhood, for at other times of the year hornbills almost invariably move about in pairs or small flocks when not assembled to roost or to gorge themselves on the fruit of some forest tree. I had previously had experience of this habit in Tenasserim, and I promptly sent out hillmen to scour the country in search of nests. Two days went by; my stay at Kumili

The patches of evergreen forest, locally known as *sholas*, provide just the type of country suited to the hornbill's domestic requirements. Hornbills almost invariably move about in pairs or small flocks when not assembled to roost or to gorge themselves on the fruit of some forest tree.

was fast coming to an end and I was loathe to leave the place without, if possible, a set of camera records of this ludicrous denizen of the jungles at his domestic operations. All the hillmen that returned brought unsatisfactory news. There were no nests to be seen this year. If Master had come last year they could have shown him at least three within a mile of the bungalow. If Master would care to accompany them 20 miles across that farthest range of hills on the horizon, they were sure to be able to show him as many nests as he wanted – and all the futile talk of this calibre so dear to the heart of the jungle man in every corner of India whenever he scents the likelihood of a 'deal'. To try the effect of a universal recipe I offered a reward of five rupees to the man who would show me a fresh hornbill's nest within a more reasonable distance of camp than those farthest hills on the horizon. Hardly had the interpreter finished conveying the glad tidings than with a general scratching of heads and significant looks all round, one grey haired old gentleman suddenly recollected that two years ago he had marked down a nest, not three miles from camp across the lake, and thought he would go and have a look at this site on the morrow. Hornbills, if undisturbed, occupy the same nesting sites year after year for several seasons and I waited anxiously next day for the return of my informer. Sure enough he turned up late in the afternoon with a grin that would have put the Cheshire cat to shame and delivered himself of the happy message that the nest was in occupation this year also.

At this stage it will perhaps help the reader to be told something about the peculiar nesting habits of this extraordinary bird. At the beginning of our hot weather, corresponding to what would be Spring in the northern latitudes, the birds select a rotten hollow, usually at great heights, in some lofty tree in evergreen forest. Having acquired a site, the female incarcerates herself within and connives with her mate to plaster up the entrance hole with a cement of mud and resin to which are added the bird's own dung, remains of fruits and any such material as happens to be handy. Only a narrow slit is left in this wall — about 4 inches by 2 — through which the cock bird passes her the food he assiduously gathers for her. He also forages for the family when it arrives into the world, until they are old enough to

It is some weeks more before the young are feathered enough to be left in the hollow by themselves, and it is at this stage that the hen releases herself from her voluntary immolation to assist her mate in breadwinning for the insatiable youngsters.

leave the hollow. The plaster becomes so hard with exposure that quite an effort is necessary to break down the wall even with a fairly heavy knife. The imprisoned hen lays two eggs as a rule and is busy incubating them for about 30 days. It is some weeks more before the young are feathered enough to be left in the hollow by themselves, and it is at this stage that the hen releases herself from her voluntary immolation to assist her mate in breadwinning for the insatiable youngsters. Throughout the period of his lady-love's incarceration the work of 'supply and transport' has to be done by the cock single-handed. He makes three or four trips to the nest with food in the course of the day as long as there is the wife alone to cater for, but when the extra hungry maws arrive, the visits of necessity become considerably more frequent. The weight of fatherly responsibility lies heavily on his shoulders and it has been observed that when the family leaves the nest it is 'as fat as butter' from high living, whereas the drastic slimming process has usually worn the father down to a skeleton!

By a remarkable provision of nature, the hen renews her wing quills by a fresh growth when within her cell, so that for a considerable time she is incapable of flight. The plaster wall is a protection to her from prowling enemies during the period of her greatest helplessness.

We started early next morning in high hopes, armed with cameras, lenses and notebooks, together with ropes and other paraphernalia, in case the spot

should be favourable for rigging up an observation platform on a neighbouring tree more or less on a level with the nest-hole. A hillman's mile is always an elastic and uncertain entity. With the slowest of slow-moving canoes it could not have taken us four hours to cover the three alleged miles. Yet it was well after 11.30 when we reached the spot where the rowing ended and the trek began, for the nest site was still some considerable distance in the interior of the forest. Our way at first lay along the margin of the lake. The crumbling 'steps' caused by the receding water level, on what in reality was a fairly steep hillside, were negotiated with some difficulty till at last our guide turned off into the *shola* where the nest was said to be. Lofty trees vied with one another in their struggle to find a place in the sun and in places were festooned with gigantic lianas, which swung from tree to tree or coiled round the stems like great serpents. A short distance into this forest and our guide suddenly stopped and pointed to an enormous *Poon* tree (*Calophyllum* sp.) with a magnificent straight bole and the first branch well over 50 feet high. Just above its junction was a knot, and it was this the hillman was pointing at. Years ago, I had seen many nests of the great Indian hornbill and had a fair idea of what to expect, but I must confess that on this occasion I was completely taken in and sensed a distinct leg pull in the whole proceeding! The knot seemed a solid mass and there was no opening visible in it. However, on the hillman persisting that that and no other was the nest, I turned my field glasses on the spot. At first there appeared little difference between what the binoculars showed and what I had seen with the naked eye, but further careful scrutiny disclosed that what had seemed an inconspicuous black streak on the knot was in reality the aperture in the built-up wall! Through it I could discern from time to time, some small movement within as the imprisoned female shifted her position on the eggs. The wall was so cunningly and skilfully built that peer as one might, it was impossible to tell where the edge of the hollow ended and the plaster began, so perfectly did its colour and texture harmonise with the surrounding bark. Unfortunately, there was no adjacent tree on which to erect the observation and photographing platform, so I had to content myself with a mound at some distance, whence a fairly unobstructed view of the nest and its environment could be obtained. The camera was trained on the knot and I waited patiently for the arrival of the cock with food for his mate. An hour went by — two — and still no signs of the bird!

The weight of fatherly responsibility lies heavily on his shoulders and it has been observed that when the family leaves the nest it is 'as fat as butter' from high living, whereas the drastic slimming process has usually worn the father down to a skeleton!

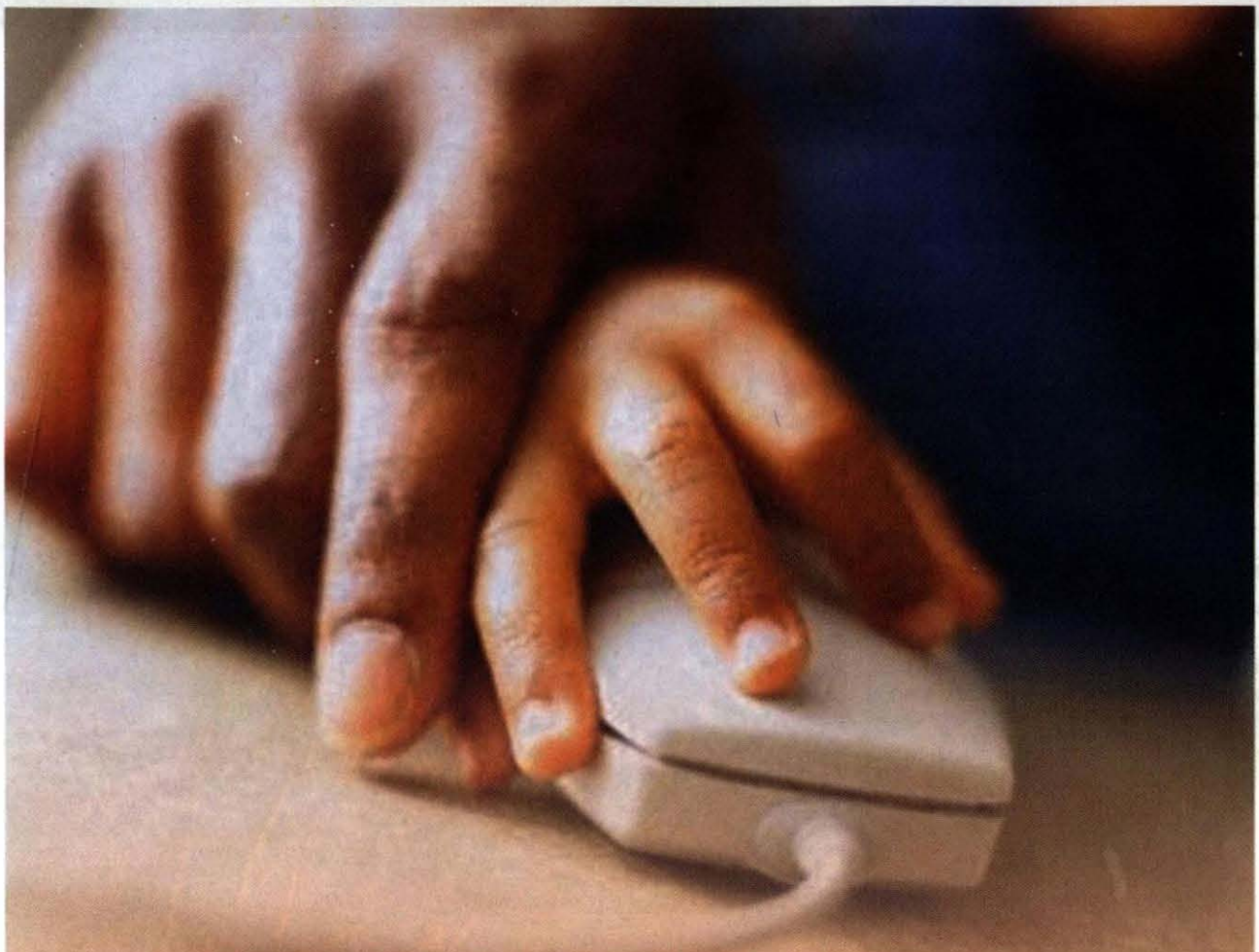
Would he ever come? The sun had now crossed well over the meridian and its slanting rays from the west proclaimed that the time for photography was fast slipping away.

At 4 o'clock it already begins to get dark in the gloomy recesses of the virgin forest, and it seemed as if we were destined not only to be disappointed in our quest, but have to go away without even getting a glimpse of the owner of the nest. Just as we had relaxed our vigil somewhat, the wheezing sound of a hornbill in flight reached my ears and the great bird presently hove in sight. We promptly 'froze' to attention. He alighted on a neighbouring branch, and made a careful reconnaissance of his surroundings. I think it was the removal of certain branches and vegetation from between the lens and the nest that first aroused his suspicions, for he continued to sit there and peer down at us for what seemed hours. The anxious turnings, twistings and posturings of his ludicrous head and outsized beak as he looked down at us, first with one eye then with the other, was so ridiculous and amusing that for a time it was positively difficult to restrain our mirth. It was, however, a case of stalemate as far as I could see. We dared not alter the uncomfortable positions in which we had 'frozen', and it was clear that our friend had no intention of proceeding with his domestic concerns until he was satisfied that we were in truth the harmless tree stumps we attempted to appear! The heavy field glasses were glued to my eyes all this time; my arms ached from the awkward way my elbows stuck out and it was impossible to change my position without giving ourselves away hopelessly. The situation grew increasingly uncomfortable until I was finally obliged to acknowledge defeat and bow to the superior patience of the adversary. At the gentlest movement, with a loud grunt and a roar as is the manner with hornbills, and with much rasping of his pinions, the great bird made off, and half an hour's further waiting failed to bring him on the scene again. As the light was fast vanishing and we had still a considerable distance back to camp, the quest had to be abandoned for the time being. Thus ended unsuccessfully my efforts to secure what would probably have been the only camera records of one of the most spectacular of the feathered denizens of Travancore, and the opportunity never recurred at any of my subsequent camps. At a later stage in the nesting operations, and where the nest is favourably situated as regards lighting conditions — which is rarely the case — photography should be a much simpler affair. After the young are partially fledged and the hen breaks down the wall to join her mate in procuring food for the young, the parents become considerably bolder and dispense with much of the previous caution in their going and coming. They will often make a determined and concerted attack on an intruder, human or otherwise, flying low and menacingly about his head with much bluster and noise, and even attempt to peck him. As the young have a habit of backing up to the edge of the nest hollow and ejecting the excreta clean outside, nests can be much more readily located at this period from the white excrements of the young and fragments of the food brought by the parents which are invariably littered on the ground for several feet around the nest tree.

The food of the hornbill consists of fruits of various forest trees to which are added by way of delicacies lizards, snakes, mice and even small birds on occasion.

The food of the hornbill consists of fruits of various forest trees to which are added by way of delicacies lizards, snakes, mice and even small birds on occasion. All the moisture they require is obtained from their natural food. One in captivity in the rooms of the Bombay Natural History Society — known to his friends as William on account of the 'Bill' — lived for over 19 years without drinking; indeed their bills are such as to render this a difficult if not impossible proposition in the ordinary way.

Among the many peculiarities of this remarkable bird mention must not be omitted of its habit of beautifying itself by artificial aids. The preen gland on the lower rump furnishes an oily fluid which is bright yellow in colour, and the bird may frequently be seen at its toilet, rubbing its enormous beak on this 'rouge pot' and transferring the colour with studied vanity to the white wing-patches which in healthy birds are often stained bright yellow.



MINING A BETTER FUTURE

At MSPL, for over forty years we have been taking a larger initiative in the development of society and the conservation of environment. With the same passion we do business. Which has resulted in the inception of educational institutions, hospitals, and charity funds, restitution of forests and wildlife. And more goodness that enrich the lives of millions.

MINING : IRON ORE & GOLD | ENERGY : WIND | GASES : INDUSTRIAL & MEDICAL

MSPL LIMITED
(A BALDOTA GROUP COMPANY)

Head Office: Nehru Co-operative Colony, Hospet-583203, Ph: Off: 432003 Mines: 444158
Grams: "HEMATITE" Fax: 08394-432333 Email: email@mspllimited.com

Regd. Office: Baldota Bhavan, 117, Maharshi Karve Road, Mumbai-20, Ph: 22030989
Grams: "HEMATITE" Fax: 022-24133766 Email: mspl.mum@mspllimited.com

Evolution of a raptorphile

Dedicated to Kekoo Naoroji

Text and Photographs:
Rishad Naoroji

Rishad Naoroji is a member of the BNHS Executive Committee and a raptor expert

A flock of common kestrels

A person's development in any speciality takes years. In this article I hope to carry the reader with me on my voyage of discovery, and how my overall interest in nature developed and evolved into a single-minded passion for raptors.

My interest in natural history was aroused at a very early age by my parents, particularly my father. From reading Jim Corbett books to me while I was yet a toddler, to later presenting me with books by Jane Goodall, Diane Fossey, Jacques-Yves Cousteau, E.P. Gee, M. Krishnan, Rachel Carson, and a host of others, covering various natural history expeditions to Africa and India.

He took me to Periyar when I was three, and by the time I was thirteen, I had spent quality time in Gir, Mudumalai, Bandipur, Bharatpur, Corbett and other areas. What stands out in my memory is that in those days to reach a park or sanctuary we drove many miles through a forested buffer zone. Today at Periyar, Corbett, Gir and numerous other parks, sprawling human habitation extends right up to the park boundaries.

In 1964, when I was thirteen, I visited Corbett and Ranikhet. At Ranikhet, I was shown an active nest on a cliff face (by an elderly British expatriate) supposedly that of a golden eagle. In retrospect, from later Uttaranchal surveys, I believe it must have been a Bonelli's which is a relatively common cliff nester in the area. Identification aside, I was immediately beguiled by the power, grace and regal bearing of this eagle whose identity is now in question. The bird's heart-stopping plunge, directly from the nest-ledge into the oak and pine forest in the valley

below, left a profound impression that is still fresh in my memory. Ever since, I have been captivated with raptors.

In 1969, my coming of age was typified by a BNHS Life Membership gifted to me by my father. In 1975, soon after graduating, I left for East Africa with my cousins. After the initial touristic safari, they left and I stayed on, supposedly for a month. I procured a Land Rover, climbed Kilimanjaro, and honed my photographic and observation skills through lengthy trips throughout Kenya and Tanzania, but based myself mainly in Masai Mara. I returned to India, seasoned in field craft, after two and a half years.

Back in India, it took time to adjust. Eric Hosking's classic AN EYE FOR A BIRD inspired me to photograph birds, but I was in a quandary whether to concentrate on wildlife photography, or to study and photograph a specific group of birds or mammals. Visiting protected areas for lengthy periods to photograph animal behaviour in parks and sanctuaries was initially a nightmare of red tape, with much time spent on procuring permissions. My real break came when by good fortune I met K.S. Dharmakumarsinhji, one of India's finest naturalists, who had a special affinity to raptors. As he spoke about them animatedly, the indelible impression of my Ranikhet experience surfaced, and I realized then that my future orientation would be towards these birds.

Early Beginnings

In 1981, I left for the Rajpipla forests on Dharmakumarsinhji's suggestion, via Chandod, with some apprehension as to how I would get to grips with the elusive forest raptors. A young Sunjoy Monga accompanied me to generally help out, especially in locating nests of passerines. We spent two weeks at Chandod observing and photographing birds along the Narmada river, then proceeded to the Rajpipla forests in June 1981 to assess its potential for photographing birdlife with a possible emphasis on raptors. Within the first three days, we observed a great concentration of the crested serpent-eagle and other common resident birds of prey, such as the changeable hawk-eagle and Oriental honey-buzzard. It was late in the year for most breeding raptors. However, serpent-eagles have an extended breeding season and with the assistance of the local adivasis, we were able to locate five nests, some with near-fledged young, and one with a downy nestling. The machan took eight days to construct, and by then the monsoon had broken. I could spend only two days in the hide, as we had to leave before

The Himalayan griffon is a typical semi-arid and desert species

Above: An adult grey-headed fish-eagle with fish, Agaratoli Range, Kaziranga National Park

Below: The adult eastern Imperial eagle has a prominent straw-coloured head

the rains cut us off from access to the main road. This trip whetted my curiosity about the behaviour and breeding biology of the crested serpent- and other eagles. I had actually built a hide, and observed this common but magnificent raptor at close quarters — exhilarating indeed. I remember J.C. Daniel, then curator of BNHS, taking the first ever photographs of the species excitedly to Sálim Ali, who expressed great interest as to where, how and when they were taken. Later, *Sanctuary* magazine published the black and white photos of the serpent-eagle in its inaugural issue of October/December 1981. It was very satisfying that with the interest and backing of the Gujarat Forest Department, after two years of corresponding and co-ordinating with the central and state governments, part of the area was designated as the Shoolpaneshwar Sanctuary.

Over the next three years, I became familiar with all aspects of raptor breeding behaviour and ecology, by locating nests, recognition of different vocalizations in relation to different types of behaviour, distinguishing nests of different species through location and size, prey spectrum, preferences and feeding, courtship, growth of young, synchronization of breeding seasons of different species with weather and prey availability, hunting methods of different species, identification and inter/intra specific interactions.

Bharatpur 1985-1989

During a reconnaissance of Keoladeo National Park Bharatpur in 1980, I had made a mental note that some day I would study the high density of wintering raptors (mainly the *Aquila*) and breeding biology of the Pallas's fish-eagle. I reached Bharatpur in mid-September 1985. A pair of Pallas's in D-Block were courting, mating and building their nest. Though I was concentrating on collecting fascinating new data on the Pallas's fish-eagle, I kept two days a week to monitor the increasing numbers of wintering raptors. By late November, the eagles had dispersed over the 8 sq. km of marsh. From then until mid-January, the numbers of migrant raptors were at peak levels.

A raptor survey on December 3, 1985 yielded a tally of 75 raptors of 11 species, which included 49 *Aquila* of the following species: imperial ten, Steppe eight, greater spotted thirty and one lesser

spotted eagle, and also fifteen marsh-harriers. Small numbers of local migrants such as black-shouldered kite, besra sparrowhawk, Bonelli's eagle, Pallas's fish-eagle, and crested serpent-eagle were noted. By end-January, a marked decline is usually noticeable in raptor numbers, especially of marsh harrier and *Aquila,* and by early February the steppe usually outnumber the greater-spotted.

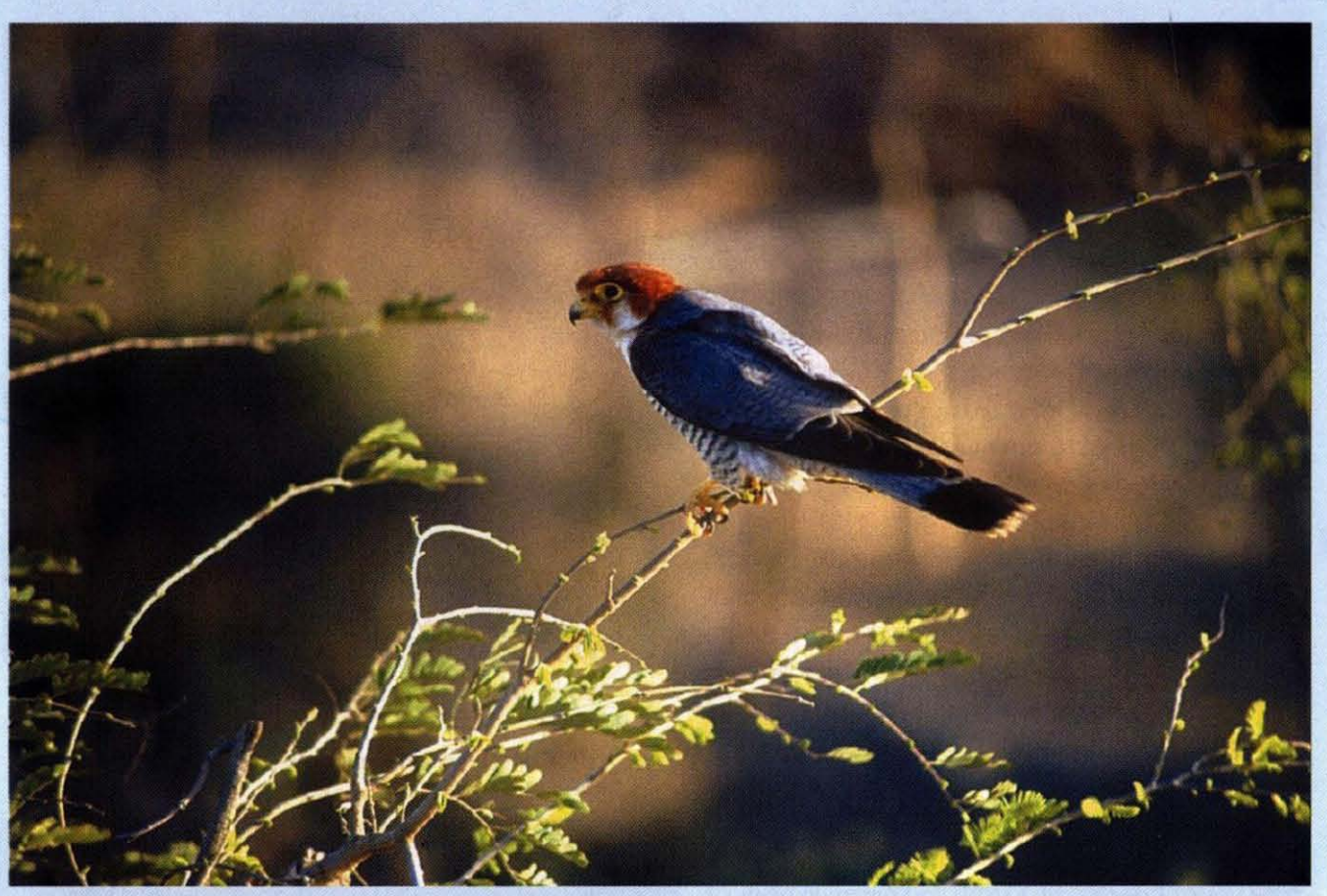
Aquila eagles are opportunists, maintaining no fixed territories in their search for food. During the first few weeks of arrival, they fed at the heronries, and I recorded aggressive encounters over food, and kleptoparasitism, or thieving, among them and between the *Aquila* and Pallas's.

Fifteen species of storks, herons and allied species breed in five major heronries in the park. By mid-October, when painted stork nests contained two to three young of variable age, the raptors predated on them and continued to do so to a lesser extent even after the young had fledged. The majority of eagles feeding at the heronry were greater spotted, steppe and imperial occasionally. During fourteen days, predation was observed at six nests of cormorants, four nests of open-billed stork and nineteen nests of painted storks. No adult painted or open-billed stork was seen to be taken. A full account of predation on heronries is available in my paper in *JBNHS* 1990: 87(1).

In April 1988, I was at Bharatpur to study the breeding biology of the short-toed snake-eagle and the red-headed vulture. However, breeding occurred early that year and young from both nests were near fledging. Just as I was wondering whether I should return to Mumbai, I received a telegram from the late Shivrajkumar, Darbar Saheb of Jasdan "Come immediately, nest of Turumti found." This was a timely windfall as I had always wanted to study the turumti or red-headed falcon *Falco chicquera.* The same day, 26th April, I left Bharatpur for Delhi, and early next morning flew to Ahmedabad and drove via Rajkot to Jasdan. Shivraj had gone to Ahmedabad for a meeting, but excitement rose to fever pitch the next day, when I was taken to Gundala (not too far from Hingolgadh), where Shivraj had found the nest by pure chance. The nest, previously built by a crow, was 12 metres high in an Amli tree in the village square and contained two very small, few days old nestlings.

Above: A typical soaring profile of a lesser fish-eagle

Below: This steppe eagle was seen on a carcass dump in Bikaner



The next day I visited Alan Sagar dam where I located another nest in a mango tree near village Bhakhalvad. This nest was not as high as the one at Gundala (8 metres) and contained three almost fledged young. Both nests were on a horizontal, or lateral crotch on a small overhanging branch away from the main trunk or canopy. The time interval between the fledging dates of the two nests was thirty-three days. The machan was built from April 29 to May 6, 1988 at Gundala and from May 8 to June 21, 1988, I saw a fascinating sequence of events at the nest. The nestling became nest-independent after forty-eight days; rather long for a small falcon. I was able to quantify and correlate all behaviour and activities previously undescribed throughout the nestling period, namely nest-sites, vocalisations, prey spectrum, storing a cache of prey (typical of most falcons), roosting, territorial aggression and nest defence, territory, inter/intra specific interactions, and behaviour of the nestling till it fledged.

Above: An adult red-headed falcon can be identified by its chestnut head, among other characteristics

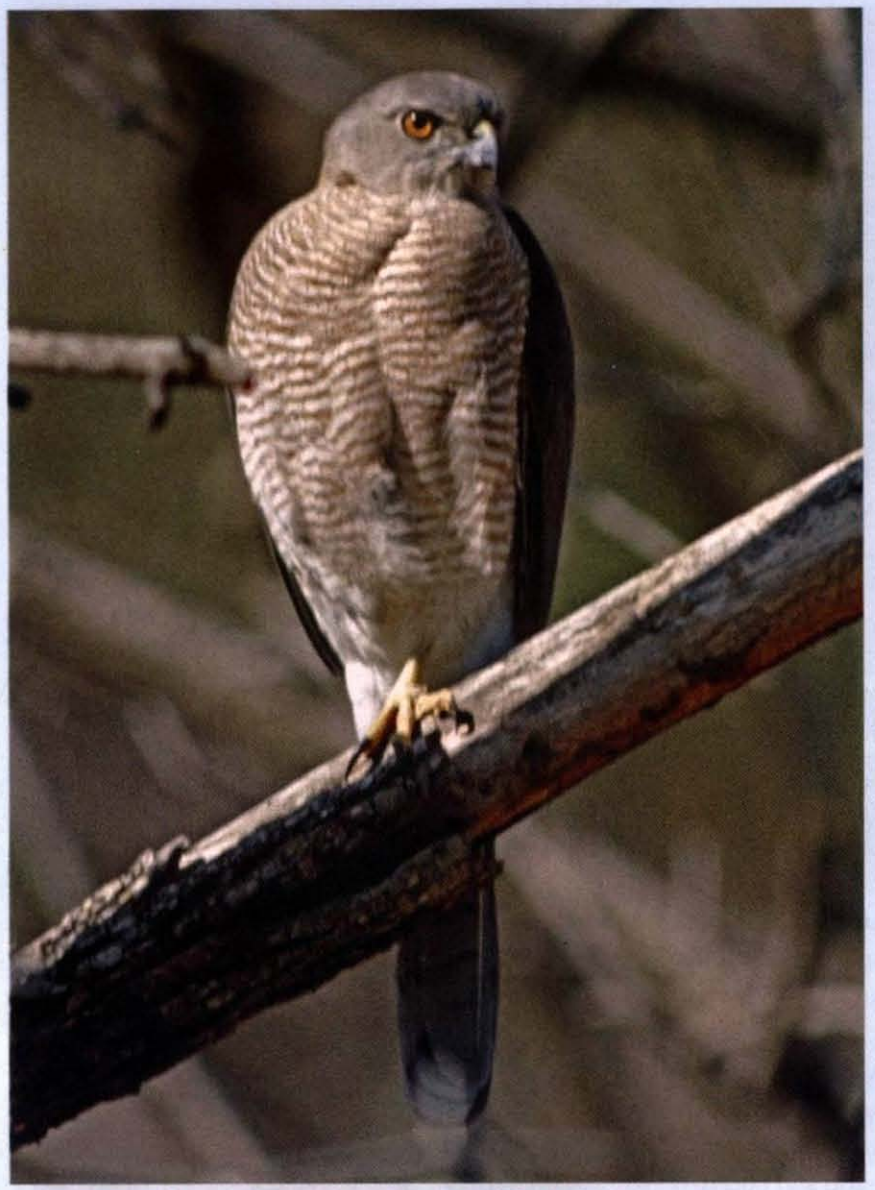
Below: An adult common kestrel has rufous upperparts with characteric diamond-shaped markings

The male's feeding perch was less than a metre away from the peep-hole in the hide. This facilitated identification of prey species. The female would sometimes snatch prey from him from this perch if he did not deliver it to the nest. Prey was cached in four or five trees around the nest. On three occasions the male persisted on entering the hide through the peep-hole and I kept him out by blocking him with the palm of my hand. Imagine making physical contact with a wild falcon! Once the nestling began to leave the nest, it would frequently land on the male's feeding perch, and try to enter the hide through the peep-hole. The hide was also used by both the adults as an observation post and many hunting sorties originated from it. The prey spectrum taken by the Alan Baug pair was more diverse as the varied habitat, with its mix of grassland, cultivation, scrub, plantations and lake, supported prey species more varied than Gundala.

In 1990, I joined the BNHS raptor project as Research Associate. The project was sponsored by the United States Fish and Wildlife Service (USFWS). On January 21, 1990, a whirlwind survey of different habitats was begun, with Vibhu Prakash, representatives of the USFWS Bill Clark and Paul Spitzer, and myself. We stayed at each place not more than two or three days and drove long hours, covering Phulai and Dhand Talao via Bhuj and Natatrana (where we saw at least a hundred marsh-harriers and numerous steppe eagles), Bhuj to Barmer via the Little Rann (where we saw a saker falcon), at Sancher on the Gujarat/Rajasthan border (one barbary falcon), and Barmer to Jaisalmer. All along this road, we saw typical semi-arid and desert species such as tawny eagle, white-eyed buzzard, long-legged buzzard, cinereous vultures and Himalayan griffon, black-shouldered kite, common kestrel, short-toed snake-eagle, laggar and red-headed falcons. Then Jaisalmer to Delhi via Jodhpur. In north India, we visited Dudhwa, where we saw a nest of the grey-headed fish-eagle and the usual forest raptors such as crested serpent-eagle, vultures and migratory *Aquila*. From Dudhwa, we proceeded to Simplipal. At Meghasini, we all saw our first collared falconet – it caught and ate a lizard. Also had good views of female pied harrier, Bonelli's, Eurasian sparrowhawk, shaheen and black eagle, but surprisingly, no Oriental honey-buzzards or changeable hawk-eagles. A few days later, we visited Darjeeling on February 3, 1990, which was

Above: Lagger falcon firmly holding a lark

Below: Satiated immature mountain hawk-eagle perched above its kill — a peahen



The long tail of the shikra is typical of the genus

disappointing, and on February 6, 1990, Mahananda Wildlife Sanctuary at the foot of the Darjeeling massif. Here we saw the collared falconet again – much less rufous, however, than the one in Simplipal. On February 8, 1990, we flew from Kolkata to Bangalore and immediately proceeded to Mudumalai, where we saw the usual forest raptors, and proceeded to Ooty where we had good views of the besra. We then covered Top Slip and Parambikulam, where we saw a king cobra. We then proceeded to Munnar via Udumulapet and Chinnar Sanctuary. At Munnar, there were a few common buzzard *Buteo buteo vulpinus,* while at Periyar, besides the usual, we saw the black baza, Jerdon's baza, besra, Eurasian hobby, rufous-bellied eagle, peregrine, many ospreys, and a shaheen capturing a parakeet; also a circling congregation of forty to fifty large pied hornbills.

We then flew to Delhi from Trivandrum. Visited Hastinapur Sanctuary, where we saw a high density of nesting white-backed vultures and tawny eagles among other commoner raptors; from Hastinapur to Delhi and on to Bharatpur, where we had good views of pied harriers.

On February 28, 1990 we reached Dehra Dun. On the way to Mussoorie, on March 1, 1990 we saw Indian spotted eagle and Himalayan griffon. At Mussoorie, the most notable sighting was a bearded vulture repeatedly dropping a bone on a rock to crack it, short-toed eagle (migratory?), Bonelli's, common buzzard *vulpinus*, many steppe eagles and our first mountain hawk-eagle, one of the most spectacular raptors I have seen. Furthermore, we saw all nine species of vultures found in the Subcontinent on this one day.

From Dehra Dun we drove to Corbett on March 4, 1990. The variety of raptors at Corbett was dazzling: common buzzard – *vulpinus*, lesser fish-eagle a lifer, many Pallas's fish-eagles, Indian spotted eagle, short-toed eagle with a snake, slender-billed vultures, *Aquila*, changeable hawk-eagles, mountain hawk-eagle and hen harrier. On March 8, 1990 we drove to Ranikhet. En route we recorded two hen harriers, bearded vultures, Himalayan griffon and cinereous vultures, many steppe eagles, Eurasian sparrowhawks, among others. On March 8, 1990 we returned to Mumbai.

Later countrywide surveys with USFWS personnel included trips to the south (Periyar, ICRISAT near Hyderabad and Rollapadu, Nagarhole and Mudumalai); Kutch (for ringing raptors), Jasdan and Hingolgadh; Corbett, Bharatpur, raptor trapping at Dasada and Little

Rann and Velavadar in winter to see the largest Montagu's harrier roost in the world. In subsequent years, I visited Velavadar twice to observe the spectacular roosting behaviour and feeding habits of the harriers.

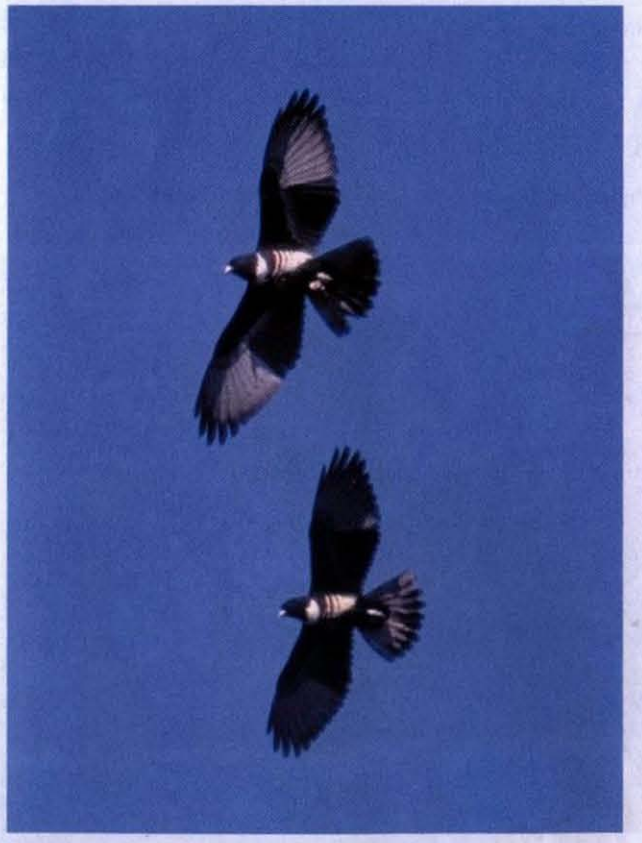
In between these surveys, research headquarters were set up at Corbett and project work continued. My experiences over seven years of study from 1990 to 1998 were published in *Hornbill* 1998: (4) and 1999: (1) and a paper in *JBNHS* 1999: 96(3). Corbett Tiger Reserve is undoubtedly one of the richest if not the most rich area for raptors in the Subcontinent, as well as for overall bird diversity. My work on the lesser fish-eagle in the Corbett area in regard to distribution, breeding success and pesticide problems, reported in *JBNHS* 1997: 94(2), is continuing and I hope to publish a monograph with my co-workers Leon Pereira and Bob Risebrough. In the summer of 1995, Leon Pereira and I studied the breeding biology of the lesser fish-eagle to ascertain what was causing widescale breeding failure. This involved collecting water and fish samples for analysis, and eggshells from deserted nests. While observing a nest at Gethia Rao, we got excellent views of the Oriental hobby. On weekends, we would drive to Ranikhet for a dawn to dusk study on the common kestrel. In previous years, I had found as many as six nests within the cantonment and two on the east and west wall parapets on the Anglican church at Chaubattia. We collected much data on food (including changes in prey preferences due to availability), and behaviour throughout the breeding period from early March to June. In 1994, an observation hide was erected at Fulay *chaur* to study the northern race of the changeable hawk-eagle. Prey included red junglefowl *Gallus gallus*, woodpecker (*Dinopium* and *Picus* spp.) and parakeets (*Psittacula* spp.). Two nests of the spectacular mountain hawk-eagle were located outside the Park in the vicinity of the Sitabani Reserved Forest. Details on breeding behaviour and nesting of this charismatic raptor have been published by the BNHS in 2003 in PETRONIA: 50 YEARS OF POST INDEPENDENCE ORNITHOLOGY IN INDIA.

From 1996 to 2004, I made several trips to the northeast, together with Harkirat Sangha; sometimes Maan Barua and Pankaj Sharma accompanied us. This included Meghalaya: Shillong Peak and Cherrapunjee in the Khasi Hills, Nokrek and Balphakram (good for Jerdon's and black baza and crested goshawk); late December saw thirty plus lesser kestrel at Balphakram in the Garo Hills. On November 11, 2001 a flock of approximately 800 Amur falcons observed in the Garo hills on the Tura Ghat road. Assam: several trips, eight to nine in all, to Kaziranga which rivals Corbett in raptor diversity, Pobitora where red-headed falcon was observed, Dibru-Saikhowa, Manas, Nameri, N C Hills to Haflong. Arunachal Pradesh: Pakhui, Bird's Nest Sanctuary, brown dipper's nest in the Tenga Valley, Namdapha (spectacular for both mammals and birds including raptors; memorable were the relatively common pied falconet, two adult white-tailed eagles and mountain hawk-eagle). Other birds included barred owlet, red-headed trogon, wreathed hornbills, *leschenaulti* or white-crowned forktail and great black-headed gull. In going from Dibang Valley (including Mayodia), Roing to Pasighat via Damuk (excellent grassland habitat throughout — flood plain of the Dibang and Siang rivers) we saw at least twenty-four slender-billed vultures, and the rare slender-billed babblers just before Nizam Ghat and after Mebo town.

This immature tawny eagle in first moult was sighted on the Bikaner/ Jaisalmer road

Above: The Indian white-backed vulture has a diagnostic white back and rump

Below: One cannot miss the distinctive black and silver pattern of an adult black baza in flight



Back to Rajasthan, from 1997 to 2001, raptor surveys throughout the desert from Bikaner to Barmer and along the Indo-Pakistan border with the Border Security Force were conducted and will continue. In winter, the Indian desert hosts a large variety and number of migratory raptors, and some residents. The other highlight was the large numbers of steppe eagles, and Himalayan griffon and cinereous vultures at the Bikaner carcass dump. The development of the Indira Gandhi Nahar Project has resulted in large-scale ecological changes during the last two decades. The Canal (now called Indira Gandhi Nahar Project) runs through the heart of the Thar desert. While the canal promises to green 7.59 million acres of arid desert land in north and western Rajasthan, it has brought in its wake habitat changes which have severely affected the wildlife in the area. Besides the increase in human settlements and livestock population, a tremendous change in agricultural practices is noticed — from subsistence to commercial farming. This has led to the displacement of graziers to non-command areas, which exerts even more pressure on the over-grazed countryside. As a result, grasslands have started shrinking. It is feared that the natural desert habitat will disappear in due course. Many species of termites, beetles and lizards have vanished from certain areas. The house rat is rapidly colonizing the command area. Along the main canal and channels, the government started a large scale afforestation programme. Some of the plantations along the main canal are now quite dense and afford refuge to forest birds and animals which were earlier absent in the area. Unfortunately, plantations of fast growing exotics like *Prosopis chilensis* are still favoured along the Rajasthan canal instead of endemic species. Salination has occurred in some parts of the command area where irrigation has been attempted.

We found many electrocuted raptors below powerlines at Kodamdesar near Bikaner. This aspect has not been looked at or addressed in India as it has in other countries in Europe, USA and South Africa. At Kodamdesar, on December 1998 alone, we observed large numbers of electrocuted raptors: one tawny, two white-eyed buzzards, 11 long-legged buzzards, 19 white-backed vultures and one Himalayan griffon.

From 1997 to 2002, systematic autumn and summer surveys on raptors (including breeding biology) and other birds were carried out in Ladakh with the assistance and infrastructural support of the Indian Army and

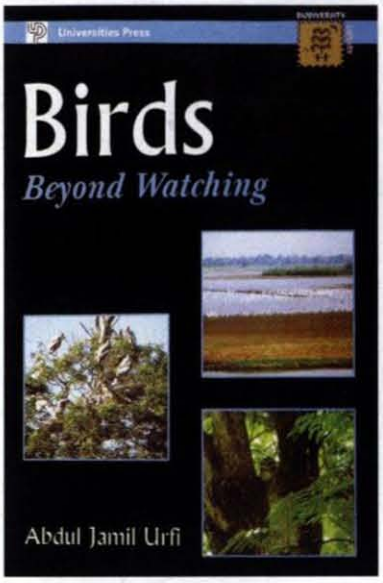
Indo-Tibetan Border Police. A major find was the first breeding record of the upland buzzard for the Indian subcontinent. Nests of upland buzzard, bearded vulture and golden eagles were found, and breeding studies are going on. The saker has been observed in Changthang during summer and autumn. One day we may find the species breeding in Ladakh. Sangha and I had interesting sightings of little grebe *Tachybaptus ruficollis*, little cormorant *Phalacrocorax niger*, large pied wagtail *Motacilla maderaspatensis* and rufous-necked finch *Pyrgilauda ruficollis*.

During April 1997 and May 2000, I visited Sashikumar, who has been for many years studying, the breeding of the crested goshawk, which was once thought to be restricted to forests. Sashi observed a high concentration of breeding pairs in the densely populated Kannur district of north Kerala, in and around sacred groves one to three acres in area. The fragmented groves are surrounded by coconut, arecanut, cashew and rubber plantations, interspersed with some indigenous trees in which the species also nests. On each visit, Sashi had identified five to seven nests in the vicinity of his farm house, 45 minutes drive from Kannur. The mix of habitat and prey availability e.g. rodents, small common birds (doves, white-breasted kingfisher, tree pie, bulbuls, etc.) and mammals (palm squirrels and bats), insects and reptiles (lizards and snakes — striped keelback, common wolf snake) account for a dense population of crested goshawks in this area. I have also frequently observed the crested goshawk in secondary forest (caused by jhumming) in the Garo Hills.

We observed nests, prey transfers, hunting, brooding and acquainted ourselves with its vocalization. Sexual dimorphism was pronounced with females considerably larger than males. I also procured some good identification photos of the species for my book. In the Garo Hills, I had observed the spectacular display of this species, usually performed by the male, rarely by the pair. The male soars in small circles and displays over the vegetation canopy at a very slow pace, fluttering the wings below the body plane with fluffed out white, prominent undertail-coverts.

In 1994, after considerable prodding from family, former BNHS scientists Ajay Desai and Ravi Sankaran, and other friends (some of the most persistent being Divyabhanusinh Chavda and Isaac Kehimkar) I started writing the Handbook on Indian raptors. Initially, deciding the format of the book and getting mentally prepared for this mammoth task was difficult. As usual I wrote by hand as my typing is too slow. As it turned out, the first half of the book (up to the falcons) was completed before a major field trip to Corbett. I returned from the trip and completed the falcon section. Each species took from three to seven days, often twelve hours a day. Then the fine tuning – checking references and adding many, many more over the next few years and much more information. The book covers all aspects of raptor biology including classification, taxonomy, conservation and management, species accounts with identification, status and distribution and detailed maps, behaviour, breeding, and a bibliography. As far as possible, I have tried to incorporate whatever is known on Indian raptors in the book. It has taken ten years and hopefully will be out next year. And further, I hope that it will help other raptorphiles in pursuing a passion that only the initiate can know and understand.

The wing tips of a mature crested goshawk barely extend beyond the base of the broadly barred tail



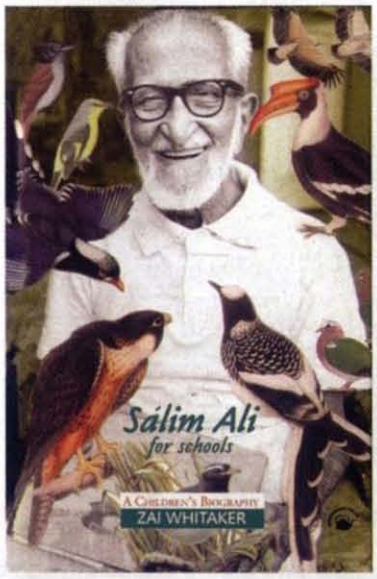
BIRDS: BEYOND WATCHING
by Abdul Jamil Urfi, 2004.
Universities Press, Hyderabad.
Pp. 214 (22 x 14 cm).
Price: Rs. 285/- (Paperback)

Reviewed by Asad R. Rahmani

Bird watching is one of the fastest growing hobbies in the world, and fortunately, India is not lagging behind. Although the number of bird watchers in India is not very large compared to our population, the tribe is increasing. We need more books, particularly in regional languages, on birds and on bird watching. This fascinating book will certainly help to create more interest about our avian friends.

BIRDS: BEYOND WATCHING is written for amateur bird watchers by a professional ornithologist and zoologist, so it has all the scientific trappings, but without too many technical terms. It covers subjects as varied as bird vocalization, mating pattern, bird census and IUCN Threat Categories. The book is full of fascinating information about Indian birds that every amateur or professional bird watcher should know. If you are looking for a book on bird identification, this is not the book for you. But if you want to know the difference between survey and monitoring, or why bird names have been changed, or how to describe bird habitat in easy language, then this book is for you.

The author should be congratulated for quoting relevant references for emphasizing a point. I found that the latest information on Indian ornithology is included in the book. The only drawbacks are the diagrams that are not up to the mark, and the colour pictures (given at the back) are substandard. The captions are banal (e.g. Islands: a unique habitat, village ponds are repositories of interesting avifauna, etc). Nonetheless, if you are looking for an easy-to-read book to increase your knowledge on Indian birds and bird issues, go for this book. At a price of Rs. 285 it is not very expensive. In order to bring bird study to a larger audience, perhaps a Hindi edition should be brought out first, and then other languages.

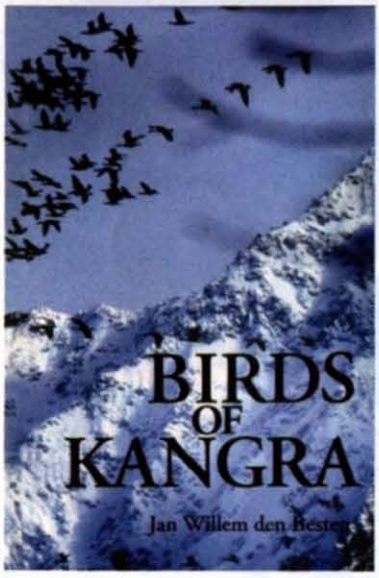


SÁLIM ALI FOR SCHOOLS by Zai Whitaker, 2003.
Permanent Black, New Delhi. Pp. 102,
(22 x 14 cm). Price: Rs. 195/- (Hardbound)

Reviewed by J.C. Daniel

In this brief and fondly narrated biography, Zai Whitaker relates, for school children, the biography of Sálim Ali, her maternal grand uncle. Sálim Ali's life was indeed the extraordinary story of a man who marched through life to a different tune to the rest of his cohorts and against all odds made a success of it. Sálim Ali, whose formal education lacked a degree, a vital handle for success in middle class India, nonchalantly and successfully followed his all consuming interest in birds, ably supported by his wife, when she was alive, and shielded by his sister thereafter. A very readable account of a person with what could be considered a peculiar life pursuit, the study of birds.

Reviewed by Aasheesh Pittie



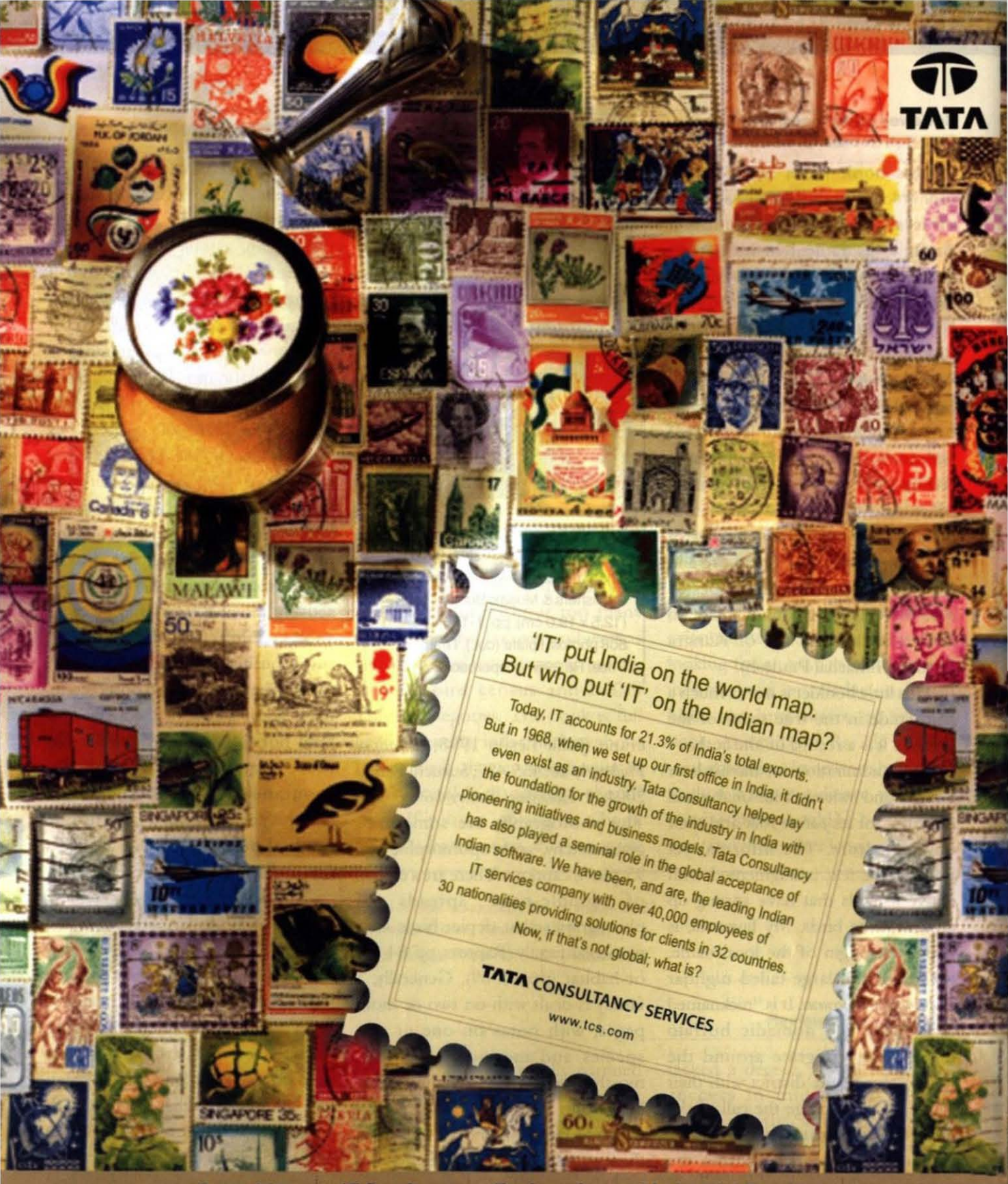
BIRDS OF KANGRA
by Jan Willem den Besten, 2004.
Dharamsala & New Delhi: Moonpeak Publishers & Mosaic Books.
(12.5 x 19.0 cm), pp. 1-176,
508 photos, I plate (col.), I map.
Price: Rs 395/- (Paperback)

This book wafts onto Indian ornithology's bookshelf like a breath of fresh and fragrant mountain air. It is as radical in its get up and presentation as was Martin Woodcock's COLLINS HANDGUIDE TO THE BIRDS OF THE INDIAN SUBCONTINENT twenty-four years ago. Woodcock's wonderfully realistic artwork merged the birds, their habitats and the text seamlessly! That endearing layout was special for it differed dramatically from that of Sálim Ali's bird books. The charm of art is the human touch, that of the photograph, the human eye and the frozen moment in time. Besten uses the latter to great advantage to showcase the bird life of Kangra district (Himachal Pradesh).

This little booklet is not as much a field guide in the true sense of the term, as it is a record of the author's apparent admiration for the birds of Kangra and indeed of his unabashed empathy for its *pahari* folk and their unique culture. The informal yet informative text is augmented with native legends that have sprung up around these birds. My favourite is about the origin of the local name, *gujjar*, for the large-tailed nightjar *Caprimulgus macrurus*. It is "nicknamed *gujjar* after the nomadic buffalo herders who migrate around the lower areas of the district with their cattle. At close range the call of the large-tailed nightjar sounds like "Chaunkh", which replicates the sound of milk spraying into a vessel when the *gujjar* milk their buffalo," (p. 93). The apparent life-long fidelity of ruddy shelducks (p. 63) was not the inspiration for sage Valmiki's epic Ramayana. It was a pair of sarus crane (Julia Leslie 1998, *J. Indian Philosophy* 26: 455-487; Suruchi Pande 2004, *J. Ecological Society* 16: 49-51). The photographs are sometimes given catchy, anthropomorphic (p. 95, pic. 4) captions. There are a couple of double-page spreads of photographs that depict birds of a particular family (Raptors, pp. 84-85) or habitat (pp. 68-69). Generally, a family is dealt with on two or more pages, with notes on one or two species and mention of others, mostly giving pointers to their ID or behaviour. Photographs of several different family members appear on these pages. Appendix I is a checklist of 555 taxa with columns showing the species recorded by Whistler (1926), Hingston (1921) and Pandey (1987), along with their status. It also gives the altitudinal range and the census totals of birds from Dharamsala and Pong wetland. The work only suffers from the lack of an index.

Since it is a book of photographs, let me tell you of some that I particularly liked. The gaggle of bar-headed geese against a backdrop of the snow-clad Dhauladhar range is quite dramatic (pp. 10- 11). A flock of long-tailed minivets (p. 112) with six males and a female in the frame is absolutely stunning. The Blyth's reed warbler (p. 137, pic. 4) dropping from a twig is so typical of warbler behaviour. The author has taken pictures that reveal the way a birdwatcher would see birds — actively moving from one place to another, blurred in flight, resting, suspiciously peering at him through foliage, feeding, perched on a bicycle, the head of a cow, or the mane of a feral horse. I am able to relate to these pictures with remarkable spontaneity, even though most pictures are small and a large format book should be on the author's future plans.

This delightful little book, replete with photographs, celebrates the birds of Kangra. Its text and photographs bring us closer to birds than any field guide will. It celebrates the deep relationship that all living things have with each other, manifest here between the land and its avian kin. Leafing through it I realised with a sudden, jolting revelation that the aim of birdwatching is not just the identification of species and compilation of data in a clinical dispassionate manner, for pure ornithology or practical conservation. It is also the conscious celebration of our surroundings.



Consulting | IT Services | Engineering and Industrial Services

Asset Based Solutions | BPO | IT Infrastructure

149 offices in 32 countries | Over 40,000 employees of 30 nationalities in 32 countries

7 clients out of the US Fortune Top 10

Global Development Centres in 17 cities in 9 countries outside India

An interesting pursuit

This refers to the query by Mr. P.M. Lad in *Hornbill*, Apr.-Jun., 2004 regarding the breast markings of forest owlets. His observations are interesting. But as moulting is a universal phenomenon in birds, identifying an individual bird with its plumage pattern would be difficult. Furthermore, birds of different age might have different markings. The facial marking of tiger is altogether a different perspective, since there is no moulting in them. However, markings of young cubs could not be a reliable individual identifying clue even in tiger. It is possible to identify individual adult birds for certain period by some deformities, loss of tail or wing feathers, etc. But this could be only a temporary phenomenon. Colour or metal banding, radio collaring or satellite tracking are the only foolproof methods of monitoring individual birds. Since birds moult regularly there is no ageing effect on its morphology.

It will be worthwhile to narrate the story of a fulmer, which once was caught and ringed by Mr. Dunnet of Aberdeen University when he was a research scholar. Photograph of the bird and Mr. Dunnet while ringing it was taken. After 40 years, the same bird was incidentally caught and a photograph of both Prof. Dunnet and the fulmer was again taken. While Prof. Dunnet showed significant signs of ageing, the fulmer looked fresh and healthy.

Nevertheless, as suggested by Mr. Lad, a study on plumage pattern of spotted owlet, and for that matter any species of bird, would be an interesting pursuit.

H.S.A. Yahya, Aligarh

The final word

I was most surprised and a bit sad to read the letter from a well-known person like Lavkumar Khacher, published in *Hornbill*, Oct.-Dec. 2003 where he said, "Unhappily, Col. Chacko has his facts wrong." This is regarding the inflow to Tso Morari from the South.

I stand by what I have said in my letter, as I am factually correct on the ground. The lie of the land does NOT permit any inflow of any stream into Tso Morari from the South.

During August 12-14, 1997, four of us, including Otto Pfister and I, camped at the southern end of Tso Morari, overlooking the Norbu-Sumdo marshes. My statement is based on our ground observations during this period.

I hope this will set records straight once and for all time.

Col. R.T. Chacko, Bangalore

Otto Pfister also writes:

The site where we camped from August 12-14, 1997 was overlooking the Norbu-Sumdo marshland. These marshes, obviously fed by underground seepage of Tso Morari, had no real river; yet, the initial small brook got increasingly bigger while flowing south, in the direction of Chumur, through the marshes, kind of draining the place. The Parang River flowing in from the west joined this 'river' further down south. Hence, this name 'Sumdo', i.e. confluence. I assume, however, that with increasing water-level of Tso Morari in June, the lake drains south and converts this brook while moving through the lower parts of the Norbu-Sumdo marshes in the eastern part into a river flowing southwards.

Can you tell ?

On February 27, 2004, while travelling by car from Lucknow to Jaunpur, on NH56, we stopped for refreshments at a roadside dhaba on the Sultanpur bypass. While seated at a table by the roadside, I was idly watching a number of Indian and bank mynas searching for food on the ground nearby, when I suddenly noted that one of these birds had only one leg. In spite of this, it appeared to be coping very well. I drew my companion's attention and we realised that there were at least 3 one-legged mynas present. The one-legged birds were all bank mynas. I hurriedly got my camera and obtained a photograph.

If there had been only one one-legged myna, I would have assumed it as a case of accident, but finding at least 3 in the same group suggests probably a genetic aberration. Later, when speaking to the locals, I was told that there is a high incidence of malformed human births in the area. Is there a connection?

This observation may be of some interest to the Society. I would like to know if there have been other reports of similar sightings and, if so, does anyone know the cause of the deformity?

James E. Cocksedge, U.K

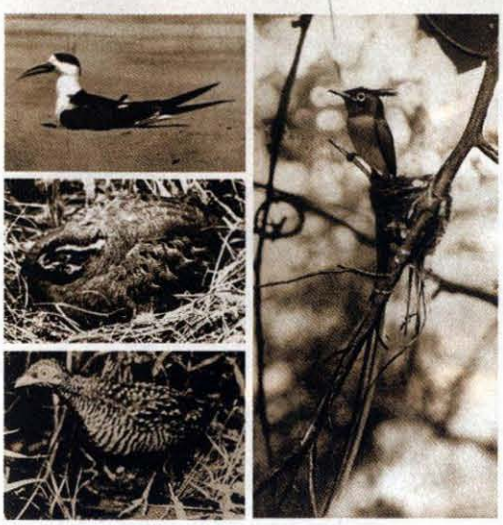
CHANGEABLE
HAWK-EAGLE

AJIT DESHMUKH

Some Indian Birds

(*JBNHS*: 1936 to 1944)

Text: **E.H.N. Lowther**



"On June 26th I thought I was at last to be permitted to photograph a Monal Pheasant at the nest but returning to erect the hiding tent not half an hour after Guffara, the Shikari, had discovered it, we found the eggs gone. A search resulted in the recovery of a piece of wet shell beneath a stump 40 yards distant. A thieving Jungle Crow are probably responsible for the disaster. There had been only three eggs in it, but we found the stained remnants of two others in a leaf-filled hollow 10 ft. below the nest." ■

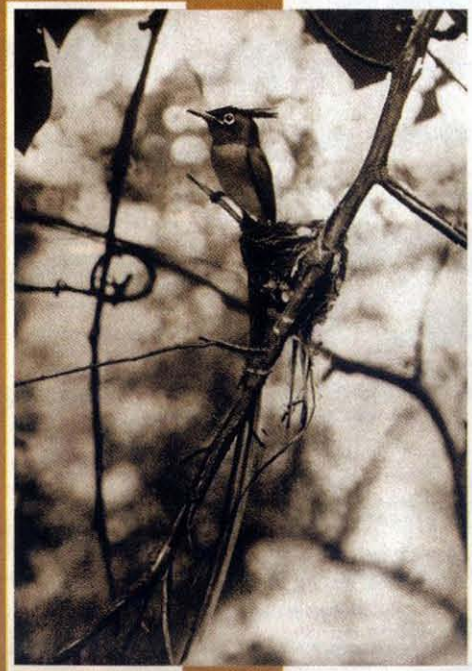
Photographing birds at the nest should be discouraged as it often attracts predators. The quote from R.S.P. Bates' article "Rose finches and other birds of the Wardwan Valley" in *JBNHS* Vol. 49 is self explanatory.

—Editors

Birds in my gardens

By 'my garden' I mean the gardens of the different bungalows I have occupied during a service of over a quarter of a century spent with the East Indian Railway, in the exigencies of which I have from time to time been posted in different parts of Bengal, Bihar and the United Provinces.

Looking through my notes I find myself confronted with such an *embarrass de richesse* that I hardly know where to start. I see that I have come across the nests of forty-five different species in the gardens of bungalows in which I have lived. Twenty-two of the number were found in one garden alone, in the Agra district. Over and above this, I have discovered the nests of nine additional species in my friends' gardens, including that of a grey hornbill, which found a nesting tree in Hume's old compound at Etawah.



Indian Paradise Flycatcher

It is a waste of time looking for nests of the different species of flycatchers that breed here until just before the monsoon breaks, but from about the middle of June all four—the Indian paradise, the white-spotted fantail, the black-naped and Tickell's blue flycatchers—are busy with household duties.

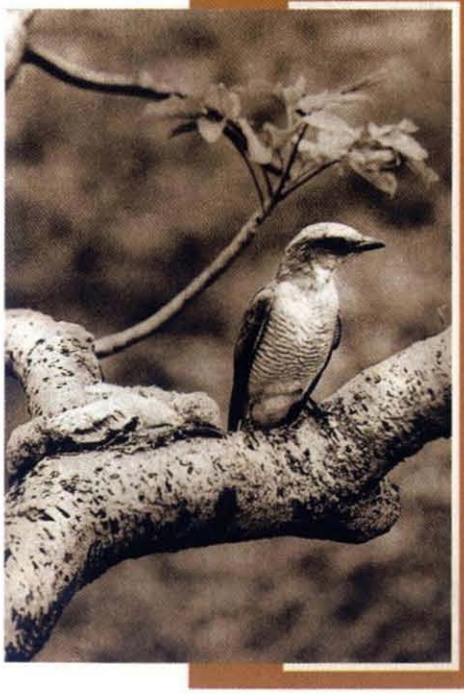
In Manbhum, the paradise flycatcher occurs in considerable numbers. With the paradise flycatcher nesting so generally it was only natural that I should devote particular attention to the breeding plumage of the male bird. The male breeds even in the chestnut phase though mating must be most unusual until after his second moult when his lovely white plumage is acquired. Only once did I come across a male, with a nest, wearing the same plumage as the female. My observations showed too that although the male paradise flycatcher shares in the tasks of incubating the eggs and feeding the young he apparently takes no part in constructing the nest. This was also found to be the case with the Himalayan sub-species.

Black-backed Woodpecker

The small woodpecker common is the Manbhum district is the yellow-fronted pied species, *mahrattensis*. The golden-backed woodpecker is decidedly scarce, its place being taken by the Black-backed woodpecker, a somewhat larger and equally handsome species. This frequents the outer fringes of mixed jungle and is found particularly about the lower slopes of small hills. For a nesting tree the *simal* is a great favourite, and often the same tree is resorted to year after year, a fresh hole only being cut higher up the trunk and a little to the side of the previous one. This is not circular in form as is usual with the Picidae but somewhat horse-collar shaped. The species is an early breeder and the egg may be found from about 10 January onwards, or even earlier, as on the 25th of that month in 1934 a nest I examined contained a young one whose wing feathers were already beginning to grow. Altogether six nests came under my inspection and not in one instance did these contain more than a single egg or young one.

Large Indian Cuckoo Shrike

One of the noisiest birds I know of—I do not include the jungle babbler which is in a class by itself—is the large Indian cuckoo-shrike. Always as it utters its loud shrieking call I feel that the bird has been given a sharp and unexpected nip or pinch by some exuberant neighbour! Keeping much to the tops of *mhowa* and *neem* trees bordering on cultivated land, and to *simal*, *gharnim* and *sal* trees where the scrub jungle adjoins deciduous forest, this cuckoo-shrike continually utters its loud parakeet-like call. About the size of a dove, this species is mostly grey in colour, darker on the upper than the lower parts, which are almost white, and closely barred about the breast. The nest too is generally built in these same trees, but whereas in the United Provinces the few I found were quite substantial saucer-shaped structures, in Manbhum they were invariably flimsily built affairs, always placed, on some horizontal branch where it forked. The nest is decidedly smal for the size of the bird, about five inches in width at the outside, and a little over an inch in depth. I have no note of a nest containing more than two eggs or young. The egg is a yellowish-buff in ground colour and is well blotched with chocolate-brown markings distributed evenly over the surface. The breeding season commences about the third week in March and continues till the middle of July.



The photograph of the large cuckoo-shrike rather gives the impression that the young have come to the end of their tether and will soon pass out. In a sense this was the case but was caused, not by prolonged exposure owing to the parents being afraid to return to the nest, but by the young having a surfeit of a mixed caterpillar diet! A charming feature about this species when courting is the manner in which it lifts and shakes each wing alternatively over the back, calling as it does so.

Jungle Bush-Quail

The jungle bush-quail is a gregarious creature, for not only do numbers feed together, even in the nesting season, but at times several pairs breed in close proximity to each other. In October 1935, I had four nests of this species under observation, all within a thirty yards circle, in a patch of *tulsi* surrounded by fairly heavy scrub jungle. Year in and year out this particular spot was a sure find for eggs of the jungle bush-quail, and in two other similar patches not two hundred yards distant we could always band on finding one or more nests. The eggs, which are a creamy-white in colour, number from five to seven as a rule, and rest on a pad of grass in coarse grass at the foot of the *tulsi* and other plants. The breeding season is from about the middle of August to the end of November.

I am certain this jungle bush-quail would never have hatched out had I not employed a *chowkidar* to keep watch over the nest all day and every day till late in the evening, until the young actually left their prisons.

Common Bustard-Quail

The common bustard-quail is a very small bird, smaller even than the Common Quail, and occurs more generally than is imagined; in many parts of Chota Nagpur it is definitely common. In addition to having two distinct nesting seasons — the beginning of the hot weather, and again from the middle to the end of the rains and even later — this species is remarkable for its breeding arrangements. The female is larger and more handsomely coloured than the male and appears to 'wear the trousers' at all times. I have tried hard to learn which of the two builds the nest but have no ocular evidence. I believe, however, from the manner in which the female completely dominates her husband, that to the latter must fall this task. At all events it is the male who alone attends to the incubating of the eggs and the bringing up of the young, the female, as soon as she has laid four eggs, finding another husband and planting a further clutch on him; which pleasant diversion she keeps on repeating until she cannot find more mates—or possibly till she is tired of laying more eggs.

I have twice photographed the male bustard-quail at home and found him to be of a nervous, timid disposition although not afraid of facing the camera. It was only after trying for three whole seasons that I succeeded in obtaining a photograph of the female bustard-quail. The nest at which the hiding tent had been erected contained an incomplete clutch and I hoped to photograph the female as she walked on to the nest to lay the last egg. When I arrived she had been wandering all round the nest, accompanied by the male, I anticipated—and obtained—a quick photograph. Not only is the black band down the center of the neck clearly shown in the accompanying photograph but it conveys a vivid impression of anger — anger at having been prevented from going on to the nest. In addition, it will be seen that the bird possesses no hind toe, a feature which at once distinguished all representatives of this family from the tree quails.

Peahen

Peahens usually lay from three to five eggs; clutches of six eggs, however, are not uncommon. Normally these are laid on the ground, in some standing crop, or in thicket. Occasionally they are deposited at some height from the ground. I myself once came across a peahen's nest in a mango tree, about twelve feet from the ground, in the space formed by the junction of a number of branches with the main trunk. Not only was the site unusual but the 'nest' contained *nine* eggs. I have also seen a perfectly wild peahen incubating her three eggs under a pile of faggots placed on the roof of a hut in the centre of a village. Another nest of this species which I inspected was situated in the heart of an aloe bush alongside the railway line. Passing by again a few hours later I was surprised to see a wild cat jump out of the bush. Only one of the five eggs remained and the shell of this also had been perforated by the animal's teeth.

Skimmer

The skimmer is a large black and white bird—much of the black is really a dark brown with very long pointed wings. At rest, and above, when the bird is flying, the wings are black; viewed from below, the wings in flight are white. The forehead, the lower sides of the head, and from the end of the nape right down the back are white, as is the entire lower plumage and the tail, excepting the central feathers which are dark brown. The rest of the skimmer's plumage is brownish-black. It will be seen therefore that the skimmer is a very distinguished looking bird. Even more compelling than its plumage, however, is the bill. In size, shape, and colouring this is distinctive. It is large, somewhat arched, the upper mandible noticeably shorter than the lower and a lovely shade of coral in colour, with the ends tipped yellow. Should the reader have the good fortune to examine, a skimmer really closely, he will notice that the mandibles are closely compressed so that they look like two fine knife blades set edge to edge. The reason for this highly specialised structure of the bill becomes immediately apparent if the skimmer is watched obtaining food. The bird skims over the water with the beak wide open—it is amazing how the wings do not touch the water at all — the lower mandible cutting through the water like a plough, the upper one clear of it. Any fish or other food met with *must* run up the incline formed: there is no escape.

About E.H.N. Lowther

"It was while at school in the UK that he was weaned by the great naturalist and photographer, Richard Kearton, from that usual boyhood pastime of egg-collecting to replace in its stead a passion for bird-photography.

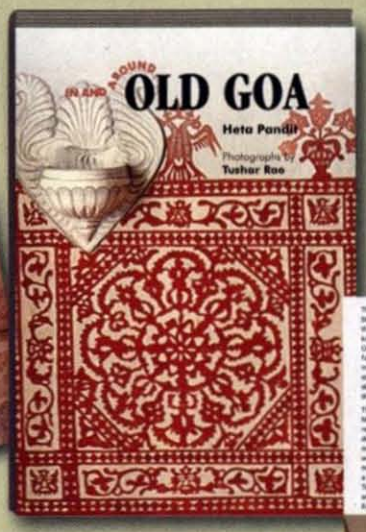
In 1911, after his return to India, where he followed in his father's footsteps in the service of the East Indian Railway, he took up with enthusiasm the photography of India's birds, an enthusiasm which later became a ruling force in his life, resulting in the fine work which for several years graced the pages of the *Journal* as well as the walls at a number of Exhibitions, and culminated in the publication of 'A Bird Photographer in India' and in conjunction with the writer..., of 'The Breeding Birds of Kashmir'."

— R.S.B. Bates

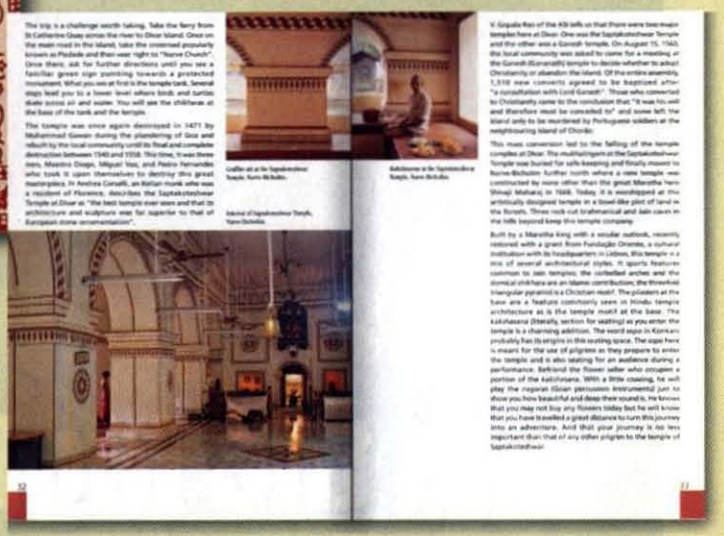
(Extract from the obituary of EHN Lowther in *JBNHS* Vol. 50)

Take the Golden Trail...

IN AND AROUND OLD GOA



by **Heta Pandit**
photographs by **Tushar Rao**



Single copy: Rs 695
Size: 140 mm x 211 mm
Pages: 132

This book transforms the simple act of walking around the old city into an unforgettable journey through time and space. With over 100 illustrations, and contributions from renowned experts, Heta Pandit, author of four books on Goa's architectural history, takes you through the monumental buildings, churches, chapels, convents, and temples of Golden Goa in her own inimitable style.

ORDER FORM

Mail _____ copy (ies) to:

Name _____

Delivery Address _____

_____

Phone: _____ Fax: _____ E-mail: _____

PAYMENT:

Cheque / Demand Draft payable to NCPA (MARG PUBLICATIONS) for Rs _____

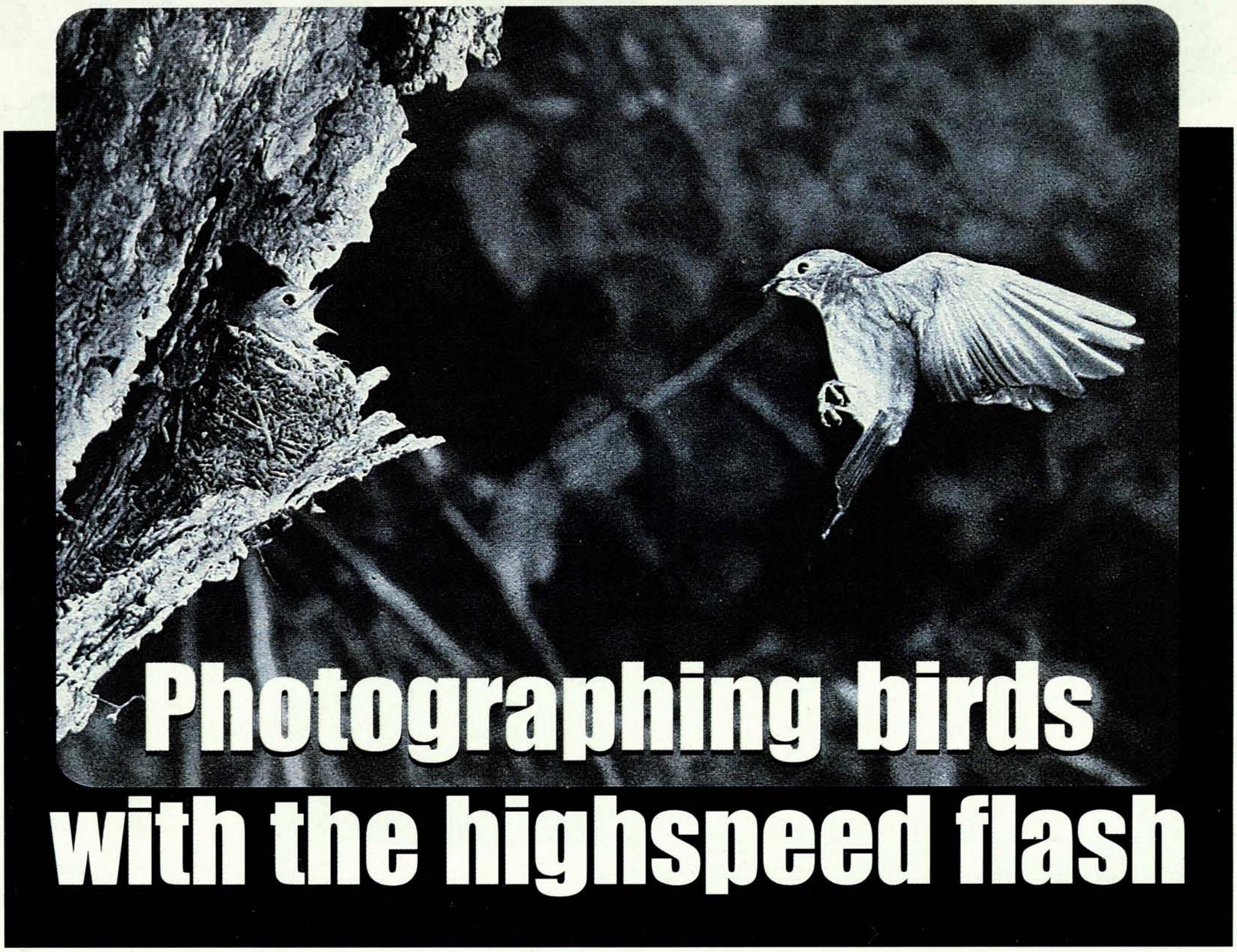
OR please charge ☐VISA ☐MASTERCARD ☐AMEX Credit Card No. _____

Card Expiry Date _____ for Rs _____

Signature _____ Date _____

Post the above form with your payment or fax it with credit card details to:
Business Development Manager, Marg Publications, Army & Navy Building, 3rd Floor, 148 Mahatma Gandhi Road, Mumbai – 400 001, India
Phone: (91-22) 22842520, 22821151, 22045947/48 Fax: (91-22) 22047102 E-mail: margpub@tata.com Website: www.marg-art.org

A PHOTOCOPY OF THIS ORDER FORM MAY BE USED



Photographing birds with the highspeed flash

A male Kashmir sooty flycatcher (= sooty flycatcher) about to feed a female in incubating newly-hatched young

Text and Photographs:
W.T. Loke

JBNHS Vol. 50, No. 4, 1952

THE use of the highspeed flashlamp (or electronic flash, as it is known in the USA) has undoubtedly caused what Eric Hoskings calls a revolution in bird photography.

The wonders of highspeed flash photography first became known to the world in the 1930s when a group of scientists at the Massachusetts Institute of Technology, headed by Dr. Harold E. Edgerton, perfected a system of taking photographs at very high speeds. Photographs taken at these great speeds showed bursting bulbs, bowls of milk at the instant they smashed on hitting the floor, the shape of footballs when kicked and other happenings hitherto unseen by the human eye.

During the last war this system, which consists of passing a very high voltage current through a tube filled with a rare gas or gases, thus producing a bright light of very short duration, was found to be of great usefulness in night-time reconnaissance photography from the air. Since the war, the invention made available to the ordinary photographer has each year grown rapidly in popularity.

A male bluechat (= Indian blue robin) leaving nest

The main disadvantage of the highspeed flash is its great weight. The power pack for my own equipment weighed some 50 lb, and in addition there were the usual camera and tripod, plus two lamps which needed a tripod each.

The 6-volt current from the batteries is stepped up to some 2,500 volts before it is discharged through the lamps. When working in the field, often under damp conditions, it is essential that the connections between power pack and lamps be completely safe from leakage, otherwise the photographer handling them might easily be killed.

In the early examples of speedflash photography, it was not unusual for the pictures to have inky black backgrounds which made the bird look as if it was flying by night. This look of unreality may be avoided by either photographing the bird with a background close enough to be illuminated by the lamps, or choosing a point where the bird is in shadow but the distant background in full sunlight. The photograph of the hoopoe was taken by this later method.

I found that in most cases two lamps were necessary. The use of a single lamp causes dense shadows in the photograph which are ugly and can only be avoided by using a supplementary light source to light up the shadows.

It is unwise to photograph when it is raining, even if the rain is only a slight drizzle. Apart from the damage likely to be caused to equipment and the danger involved, raindrops get

The main disadvantage of the high-speed flash is its great weight. The power pack for my own equipment weighed some 50 lb., and in addition there were the usual camera and tripod, plus two lamps which needed a tripod each.

A male paradise flycatcher (= Asian paradise-flycatcher) approaching the nest with food

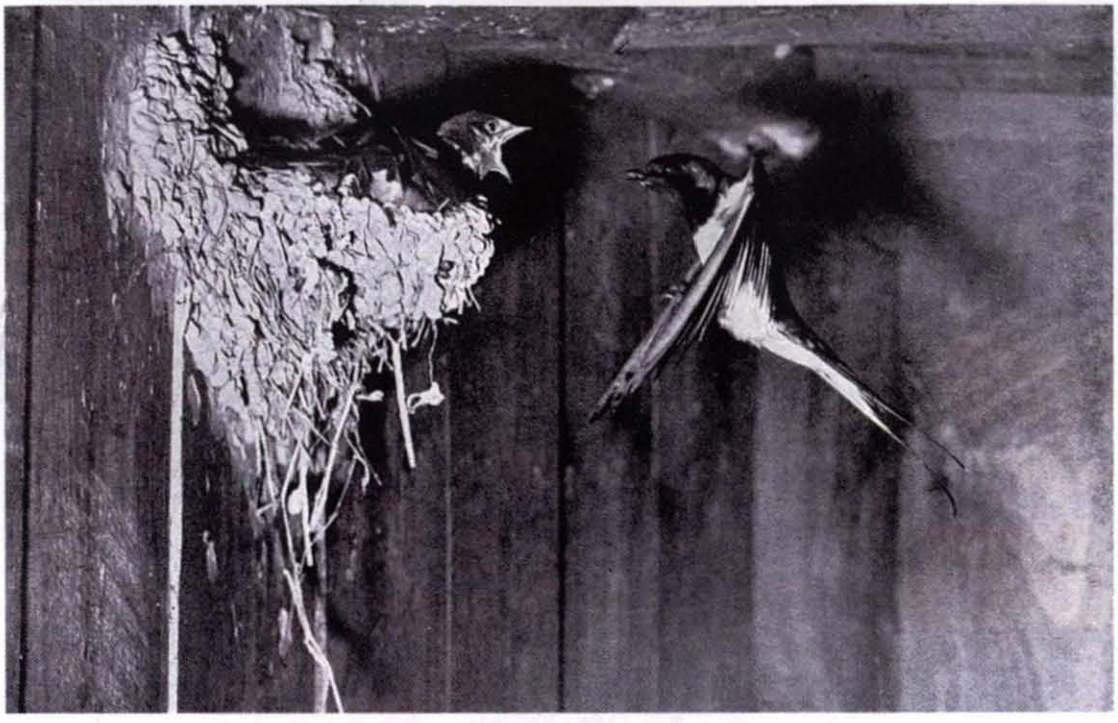
'frozen' and in the photograph appear as round blobs which (as this happened to me) made me think at first that my film had deteriorated.

A developer which will give good shadow detail is essential and I found 'Promicrol' from this point of view most satisfactory. My camera was a quarter-plate Speed Graphic and I used a 10-inch telephoto lens for all my pictures.

There is no doubt that the highspeed flash will cause as great a revolution in bird photography in India as it has done elsewhere. Photographs of quick-moving birds, like the bluechat, which always nests on the ground in dark places, could not be obtained except by using it. As it does not give dense, hard shadows of the kind usually associated with pictures taken with the 'M' or 'F' type of flashbulb, the results are also more pictorial.

I did not have an opportunity to use colour films with my speedflash but as the light emitted is white in colour, there is no reason why daylight-type colour film should not be used satisfactorily with it.

Hoopoe (= Common hoopoe) leaving nest with faeces packet of young



Common swallow approaching nest

When technical improvements finally bring decreased weight without decreased efficiency, the use of the speedflash in the high places of the Himalayas will become, as indeed it should be, a problem in photography and not a problem in transportation.

About Loke Wan Tho

W.T. Loke's connection with the Bombay Natural History Society dates from 1942. It was during this period that some of the regional bird surveys by myself under the sponsorship of the Society were under way. No great persuasion was needed for Loke to attach himself to one of these. He soon proved an exceptionally enthusiastic observer and collector of birds, and later also a capable assistant in the taxonomical studies on the collections, acquiring in the process a sounder all-round knowledge of Indian ornithology.

Loke was a great lover of English literature with a fine sense of appreciation and criticism. He himself wrote pleasingly with an easy style and a keen sense of humour, and his contributions to journals and magazines were eagerly sought after. His articles from time to time in the Journal of the Bombay Natural History Society, illustrated with his own excellent photographs were always enjoyed and greatly looked forward to.

Loke was a perfectionist, while seeming to airily click his camera he would have carefully calculated in advance the result he was likely to attain by underexposing by so much and later by overdeveloping the negative by so much, minutiae that accounted for the disparaging difference his companions usually found between exposures made by themselves — of the same subject, at the same time, and from the same spot — and the results he produced! It was therefore by no accident that he came to be regarded as one of the finest photographers in the East, not only of birds but also of archaeological subjects.

— Sálim Ali

(Extract from the obituary of Loke Wan Tho *JBNHS* Vol. 61)

We are grateful to the

MEHTA SCIENTIFIC EDUCATION & RESEARCH TRUST

for a generous corpus grant to constitute
the *Pratap Saraiya Hornbill Fund*
to support the publication of *Hornbill*

SINGAPORE
Cutlery

UK
Cutlery

INDIA
Cutlery

Never underestimate the importance of local knowledge.

Chopsticks? Knife and fork? Fingers? You don't need to ask if you're a local.

At HSBC, we have banks in more countries than anyone else. And each one is staffed by local people.

We have offices in 76 countries and territories; Europe, the Asia-Pacific, the Americas, the Middle East and Africa.

▸ www.hsbc.co.in

Being local enables them to offer insights into financial opportunities and create service initiatives that would never occur to an outsider.

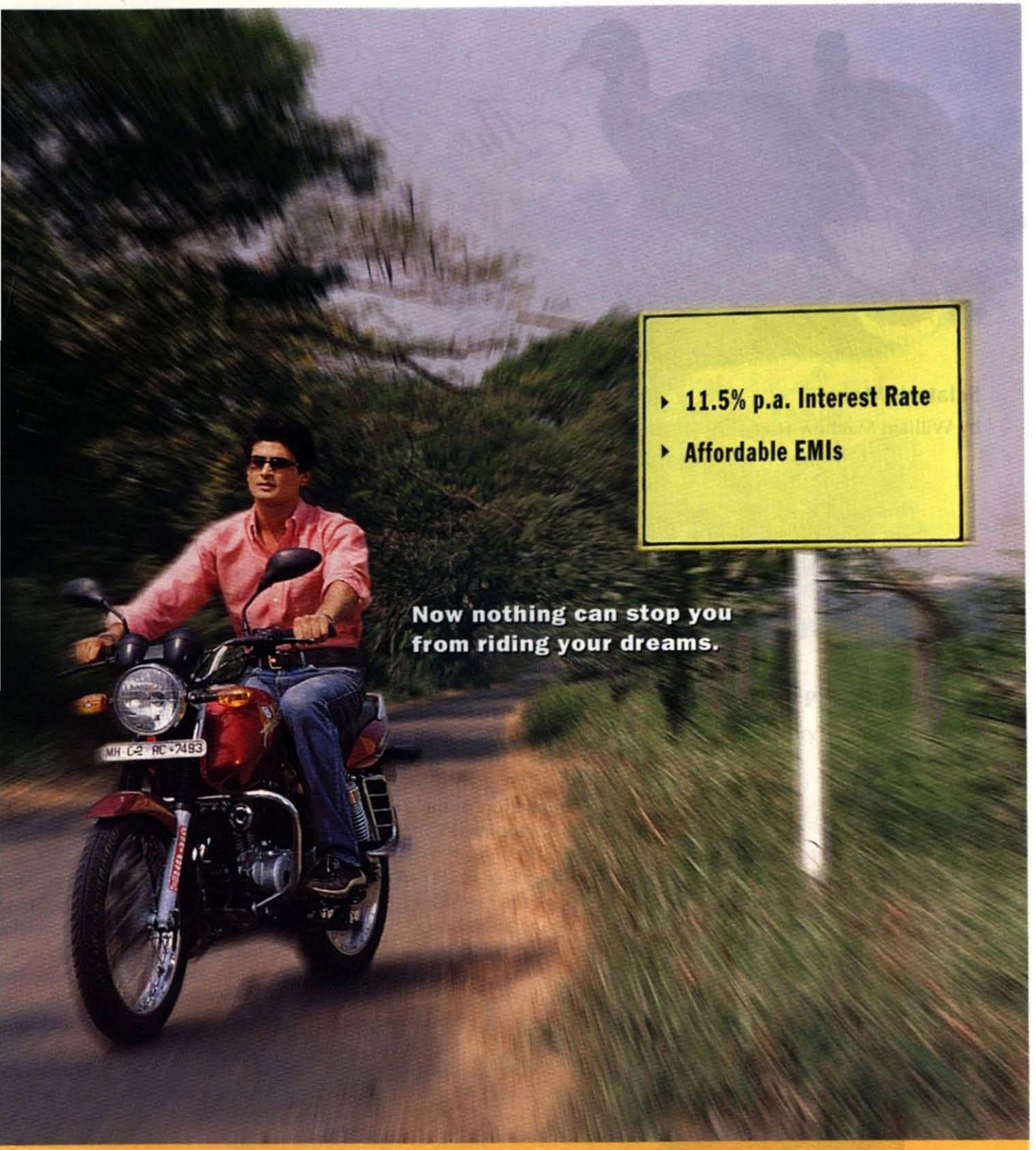
It means our customers get the kind of local knowledge and personal service that you'd expect of a local bank.

And a level of global knowledge and widely sourced expertise that you wouldn't.

HSBC

The world's local bank

Issued by The Hongkong and Shanghai Banking Corporation Limited, India



Baroda Two-Wheeler Loan

- Low margin
- Longer repayment period - up to 5 years
- Loan up to Rs. 1 lac. For further details contact nearest branch today or visit www.bankofbaroda.com

बैंक ऑफ़ बड़ौदा

Bank of Baroda

Fayde ka Sauda

Two-Wheeler Loan

percept/H-235-BOB

Sclater's Monal
by William Matthew Hart

The Birds of Asia
PHEASANTS

JOHN GOULD (1804-1881), ornithologist, writer and publisher, produced a monumental series of illustrated books of birds throughout the world. His life spanned most of the nineteenth century, an era of great interest in the pursuit of natural history knowledge. Born at Lyme Regis, Dorset, Gould was the eldest child and only son of Elizabeth (née Clatworthy) and John Gould, a gardener. When he was an infant the family moved to Stoke Hill, near Guildford, Surrey, then an area of wild heathlands and commons. In THE BIRDS OF GREAT BRITAIN Gould described his childhood delight at being lifted by his father to see the bright blue eggs in a hedgesparrow's nest, and recalled country children's games of collecting strings of coloured eggs to decorate cottage walls. At Stoke Hill four younger sisters were born, but nothing is known of Gould's education.

In 1825, when 21, Gould moved to London to work as a taxidermist. He received royal commissions, the most notable of which was to assist in the preservation and mounting of George IVs' pet giraffe, the first to live in England, which sadly died at Windsor Great Park in 1829, two years after its arrival from Egypt. Shortly after the foundation of the Zoological Society of London, Gould aged 23, was appointed 'Curator and Preserver' at its museum in Bruton Street.

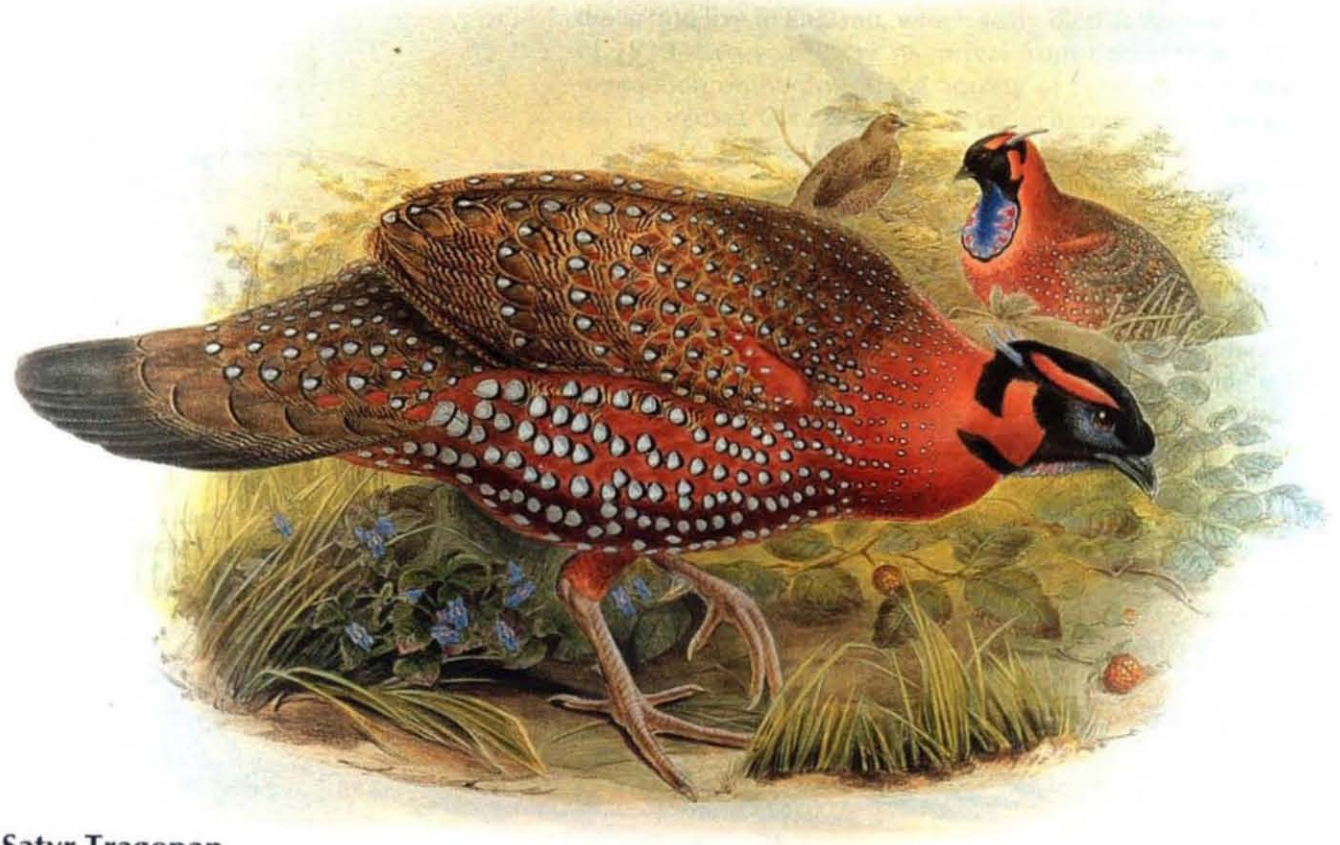
THE BIRDS OF ASIA (1849-1883), one of Gould's most ambitious projects, depicted birds ranging over a vast geographical area, India, China, Japan, central Asia, Turkey and Malaysia. With the rapid expansion of British colonies and exploration into new lands, natural history collectors, often military officers or diplomats serving abroad, sent hundreds of specimens to England for examination and identification. In THE BIRDS OF ASIA many new discoveries were illustrated including magnificent pheasants, partridges, kingfishers and sunbirds. Wolf and Richter portrayed some gorgeously plumaged Himalayan pheasants, which could be seen live at the Zoological Gardens, Regent's Park. The vast scope of this series, and Gould's preoccupation with other major works, meant that the parts of THE BIRDS OF ASIA were issued only once yearly and it became the most protracted of all Gould's endeavours, eventually taking thirty-four years for the thirty-five parts to be issued. Not only Gould but some of his original subscribers died before the set was completed. The last three parts appeared posthumously, and were prepared by Sharpe with William Hart's illustrations.

Blood Pheasant
by Henry Constantine Richter

Grey Peacock Pheasant
by Henry Constantine Richter

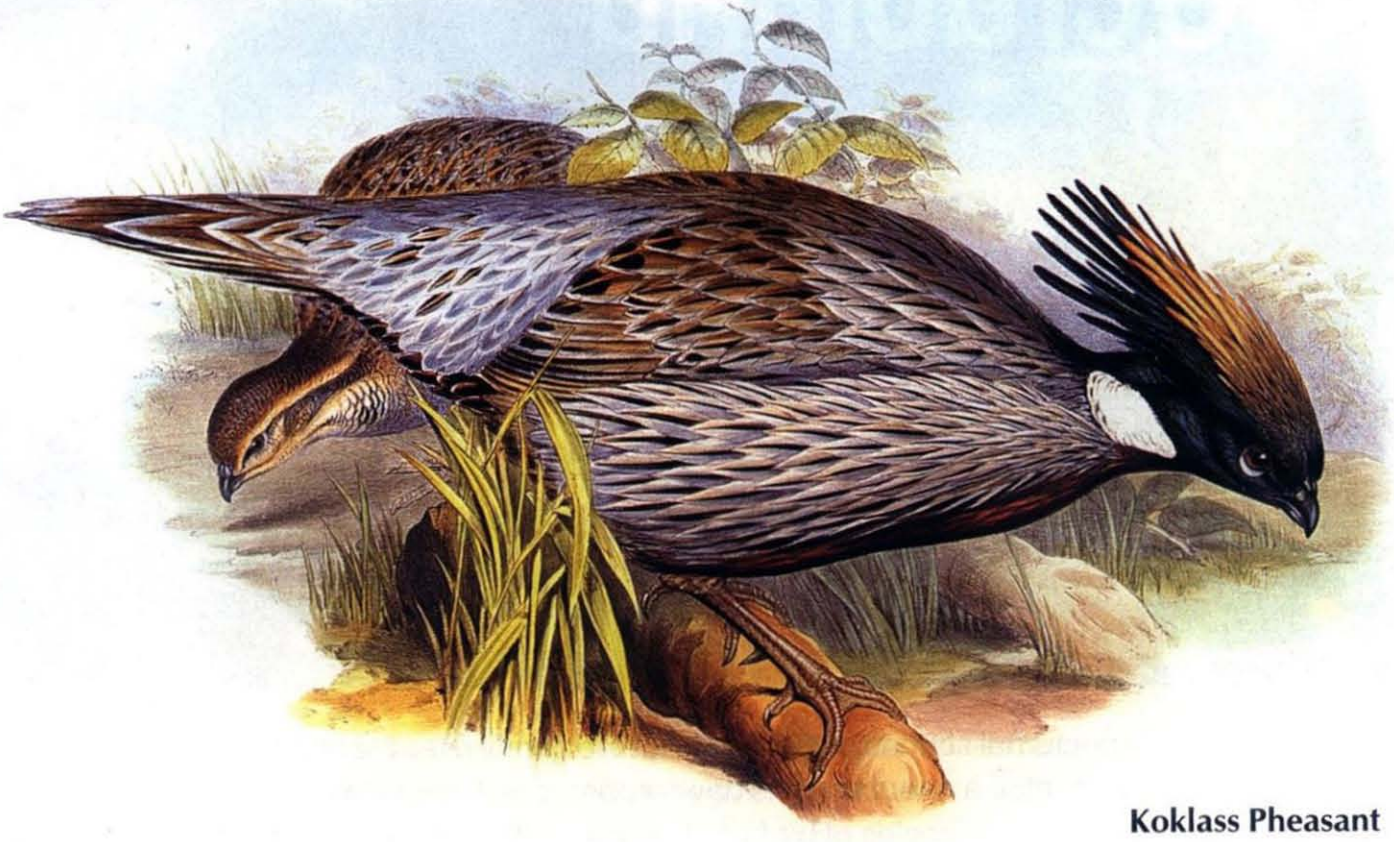
Kaleej Pheasant
by William Matthew Hart

Temminck's Tragopan
by Henry Constantine Richter



Satyr Tragopan
by Henry Constantine Richter

Blyth's Tragopan
by Joseph Wolf



Koklass Pheasant
by Henry Constantine Richter

Small bee-eater is a widespread resident found in loose parties and flocks, usually perched on dead branches, fences, and telegraph wires. Generally gathers around insect swarms or near forest fires to catch insects in flight, particularly hunts small insects in mid air, nests on stream banks in holes. Hundreds of birds can be seen roosting on the same tree.

Birds of Scrubland

The **painted sandgrouse** is another ground dweller found in scrub forest, usually in pairs or small parties. If alarmed it remains motionless until a very close encounter, and prefers flying to running. Often comes to drink water during twilight hours.

It was cold and the nocturnal sounds of the forest floated gently over the night. Combined with the distant eagle- owl hooted from atop a neem tree. As dawn approached, every leaf and blade of grass moistened we counted not less than 60 species of birds. When we finally turned back from this magical scrubland,

The **bay-backed shrike** is a small bird, seen solitary or in separated pairs. It perches on low bushes, and hunts insects and small vertebrates. It appears to be a miniature rufous-backed shrike, but differs in the maroon back and two wing mirrors, which become visible in flight.

Black-shouldered kite is found singly, perched on poles or telephone wires, cocking its tail now and then. Its hunting habit is unique among birds of prey. It hovers over the ground for a long time and swoops down with lightning speed to catch its prey.

Indian roller is solitary, but often found in pairs during the breeding season. It actively guards its territory and chases off competing birds. Generally feeds on various insects and small vertebrates. Performs a spectacular aerial display during the breeding season, it nests in hollows of trees and defends its nest vigorously.

calling of jackals was the closer chuckling of nightjars and somewhere not far from us, an Eurasian with dew. We sat silently, watching and listening to the jungle wake up. In a short span of two hours, we wondered how many more wonders it had in store for us in the days to come!

The nocturnal **stone-curlew** resides in scrubland and forest, preferring groves near water bodies. It lives in pairs or small family parties in the same place for years. Its loud resonating call is heard more in the evenings. When alarmed, it freezes and squats with its neck pressed flat to the ground, and is hard to locate due to its cryptic plumage.

Montagu's harrier is a migratory bird of prey wintering in the ground along with other species of harriers, generally

Ind[illegible] It has an interesting habit of communal roosting, on on a patch of grass or in an open ploughed field.

The **short-eared owl** is among the few owls that migrate across continents. Mainly a winter visitor and passage migrant, this diurnal, terrestrial species affects scrub forest and grasslands. Most of its hunting is done by flying low on the ground and swooping down at the slightest movement by the prey.

A typical ground bird — the **grey francolin** — affects scrub and grassland. Usually found in pairs, family parties or small flocks, when alarmed it runs swiftly and takes refuge in bushes; relies on its legs and flies only when persuaded. It is reared for cockfighting in some parts of the country.

Rufous-backed shrike, also called the butcher bird due to its habit of impaling its prey on thorns, is a ferocious predator that feeds on various insects and small vertebrates. It sometimes pirates food from other birds. A north Indian species, it is a widespread migrant in winter.

Text: **Girish Jathar and Ajit Deshmukh**
Photographs: **Ajit Deshmukh**

Girish Jathar is a Research Fellow at the BNHS. He is presently studying the forest owlet for his Ph.D. dissertation.
Dr. Ajit Deshmukh is an avid bird watcher. He is presently studying for his M.S. (Orth).

The Bombay Natural History Society

Established in 1883

proudly presents

Treasures of Indian Wildlife

a book dedicated to the memory of the now extinct Indian Cheetah

A veritable treasure trove of rare paintings and articles on all aspects of wildlife

For sponsorship and booking information, please contact

Dr. Ashok Kothari, Tel.: 26494535 (Clinic), 26613403 (Resi.), Mobile: 9869002084, Email: Akdeesawala@hotmail.com

Dr. Boman F. Chhapgar, Tel.: 22844867

Mr. Prashant Kumbhar, Library Assistant, Tel.: 22821811, Email: bnhs@bom4.vsnl.net.in

Why Save Birds?

Compiled by: **M. Zafar-ul Islam**

Zafar-ul Islam is the Projects Manager IBA & IBCN at the BNHS

M. ZAFAR-UL ISLAM

Species extinction is not an isolated natural event, but the result of major alterations in ecosystems. Secure ecosystems are responsible for global climate pattern, biogeochemical cycles, hydrological cycle and many similar phenomena. Therefore, for future generations to rely on these ecosystems, we must act now to safeguard them by maintaining a natural balance in every component of these systems.

Seventy-eight out of 1,225 birds in India are threatened with extinction, while many common birds are disappearing. Birds are important indicators of the state of our environment and biological diversity, and their decline clearly indicates that we are abusing our forests and wetlands. Three-quarters of all threatened species depend on forests, yet widespread deforestation continues unabated. Wetland birds are threatened because of drainage of marshes and pollution of river systems.

Important Bird Areas Programme

The Important Bird Areas Programme is a global initiative aimed at identifying, documenting and protecting a network of critical sites for the conservation of birds through site-based projects managed by the partners of BirdLife International. The Bombay Natural History Society (BNHS) has been the partner designate in India since 1999, and has successfully completed site-oriented research and action, encompassing management, monitoring, education, advocacy, and national and international legal protection.

For a number of threatened bird species, especially those with restricted ranges and exclusive habitat requirements, effective site protection and management is the key to their survival. 465 IBA sites were identified in India, on the basis of four standard global criteria designed by BirdLife International to help select representative areas of the most important bird habitats, particularly those which are under severe pressure: (a) presence of globally threatened species (b) restricted range or endemic birds, (c) biome restricted assemblages and (d) sites having large congregations of birds. A recently released Inventory provides comprehensive information on IBA sites and species, to be used as an advocacy tool for site and species conservation, to enable informed decision-making. The short and long term aims of the IBA Project are:

- Help identify high biodiversity areas.
- Contribute in the development of national conservation strategies, and highlight sites which are threatened or inadequately protected.

Bird trade (above) and continually denuding habits (below) are just two of the many threats that birds face

ASAD R. RAHMANI


M. ZAFAR-UL ISLAM

- Help identify future priorities for birds and biodiversity conservation action.
- Provide decision makers with high quality biodiversity information for sustainable land and resource use.
- Assist the Government in the implementation of international agreements, such as the Convention on Biological Diversity.
- Provide material for education and training.
- Help build national and regional networks of ornithologists and conservationists through the Indian Bird Conservation Network.
- Guide the work of other NGOs.
- Influence global conventions, e.g. Biodiversity, Ramsar Convention.
- Influence regional migratory bird agreements.

At present, there are 18 declared Ramsar sites in India. An additional 130 sites, which qualify for the Ramsar congregation criteria, have been proposed for listing under the Ramsar Convention through the IBA programme. Most sites are community/gram panchayat owned wetlands, and face a number of threats like poor agricultural practices and deforestation in catchment areas, leading to soil erosion and siltation of rivers and lakes. Direct drainage for cultivation has destroyed many small wetlands and severely damaged others, such as Patna in Aligarh and Jaisamand Lake in Rajasthan, often with little economic benefit.

One of the main threats for some species is their trade, nationally and internationally, for commerce as well as livelihood. According to the Convention on International Trade on Endangered Species of Wild Flora and Fauna (CITES), trade of species listed in the CITES appendices (e.g. eastern Imperial eagle *Aquila heliaca*, green munia *Amandava formosa* and Finn's weaver *Ploceus megarhynchus*) is banned or regulated, depending on the level of threat. Species that are morphologically similar but not threatened, and may be confused with endangered ones, are also listed.

Many threatened and restricted range species are declining because of the invasion of alien species in their habitat. For example, domestic goats introduced on Narcondam Island in the Andamans affects the nesting sites of the Narcondam hornbill *Aceros narcondami*. The Nicobar bulbul *Hypsipetes nicobariensis*, and Andaman crake *Rallina canningi* are similarly affected.

Indian Bird Conservation Network

In India, a number of studies have been conducted on birds and their habitat, but there is no common platform from which the information could be disseminated and pooled. In 1998, the BNHS organised a Strategy Planning Workshop in Mumbai attended by recognised ornithologists of India to discuss the issue. It was unanimously decided to have a strong network of ornithologists and conservationists, called the Indian Bird Conservation Network (IBCN) with the following mission:

Promote conservation of birds and their habitats through development of a national network of individuals, organisations and the Government.

The objectives of the IBCN are (a) research and monitoring, (b) conservation action, (c) network development, (d) awareness and education, (e) policy and advocacy, and (f) fund raising.

The IBCN is one of the leading membership networks of Indian organisations and individuals who collaborate to promote the conservation of birds in

The need of the hour is to strengthen a countrywide network of organisation and individuals (above) that value birds and the environment (below)


ASHFAQ AHMED ZARRI

India and the conservation of biological diversity as a whole through its members. At present, the IBCN has more than 1,300 individual and 75 organisations, supporting the bird conservation movement in India. Some of its members are not ornithologists, but support the IBCN activities.

The Network brings together diverse strengths and expertise focused on strategic conservation objectives. In this way, IBCN acts as a conductor, inspiring and directing a network of partners, all helping to implement a larger strategy for conservation action in India.

ASAD R. RAHMANI

Monitoring and conservation programmes for many critical species have been implemented by the BNHS

How to conserve birds and other biodiversity

Conservation of Species: Protecting a species through conservation action includes legislations, monitoring, research, prioritisation, management of populations, and management of land. Such an approach is often used for species of economic or cultural importance, and increasingly for species that are threatened with extinction at a local, national or global level.

The Species Recovery Programme for the critically endangered *Gyps* species of vultures in India, has been implemented by the BNHS in collaboration with the BirdLife International, RSPB, and Zoological Society of London. Monitoring and research programme for the forest owlet and Jerdon's courser, also critically endangered species, are in progress with support from the Ministry of Environment and Forests, Government of India, Darwin Initiatives, and RSPB.

The IBCN and BNHS with the collaboration of BirdLife International have identified species that are threatened with extinction or are of global conservation concern. It is intended to set up an Indian Species Working Group to promote species conservation and to develop the Species Action Plan for globally threatened birds in India. IBCN aims to build the capacity of all its members develop and initiate conservation action in the field.

Working with People: A consistent theme underlying all IBCN and BNHS programmes is to allow site-adjacent communities to have a say in the management of high-biodiversity sites and strengthen a country-wide network of conservation organisations and individuals that value wild birds, biodiversity and the environment at large. The members of IBCN and BNHS will produce and execute regional plans for advocacy, communication and education; establish Site Support Groups, train and raise funds to build awareness to value birds.

Conservation of Habitat: A great threat to birds and to biodiversity in general, lies in the continuing erosion of the quality and extent of habitats across the entire landscape. The loss and degradation is driven by the increasing intensity of human uses of the environment. The conservation of habitat extent and quality across the landscape cannot be achieved solely by the protection of representative areas. Central government and regional authorities can favour and encourage conservation in the way that they formulate and use their laws, policies, plans, programmes, initiatives, subsidies, taxes, funds, inter-governmental relations and other broad measures. Ideally, these should be fully integrated into land-use policies, regulations and plans, across all sectors of the economy and at all scales. Government of India has recently outlined a strategy for conserving birds and their habitats across India over the next 20 years and will agree on common policies and plans for key habitats in the near future. Analysis of the threats affecting the network of IBAs will be an important contribution to this and the National Biodiversity, Strategy and Action Plan. ■

50th Wildlife Week Celebrated

Mumbaikars learnt the importance of forests in water conservation

Beautiful paintings were made by these enthusiastic school children

The Indian Board of Wildlife was established in 1952, by the Govt of India to draw attention towards the state of India's forests and wildlife. The Board decided to observe Wildlife Week every year, since 1954, during the first week of October.

This being the golden jubilee year of the Wildlife Week Celebrations, the Bombay Natural History Society (BNHS) had an eventful wildlife week. The BNHS team at Hornbill House and the Nature Information Centre (NIC), along with its partners, the State Forest Dept and BG India, had organised a series of programmes to celebrate the event.

At the NIC, Mr. Ashok Khot, IAS, ACS (Forests) Govt of Maharashtra inaugurated the Wildlife Week Programme, in the presence of Mr. K. Subramanian, IFS, PCCF (Wildlife) Maharashtra State, Nagpur, Mr. Debi Goenka Hon. Treasurer, BNHS, Dr. Asad Rahmani, Director BNHS, Mr. Nitin Rai, Manager Admn. BG India, Mr. Satish Gawali, Managing Director Maharashtra Tourism Development Corporation, and many other dignitaries.

On October 1, a *prabhat pheri* of more than a hundred enthusiastic students, teachers, forest officials and NIC staff campaigned for the conservation of Sanjay Gandhi National Park (SGNP) around Borivli Railway Station Road.

A unique opportunity to visit Tulsi lake was given to about 100 citizens of Mumbai and a group of 30 journalism interns, working on a project based on man-animal conflict, on October 2. The role of forests in water conservation, among other issues, was explained to these groups. The programme ended with a short presentation on SGNP.

NIC conducted a series of 14 slide shows at KHOJ-2004, a Science Exhibition at DAV Public High School, Thane, which was attended by more than 700 students, parents, teachers and scientists.

In order to create a deeper understanding of the forest, and the role of corporate groups for their conservation, a nature education programme for 30 officers from Mahindra and Mahindra, and their families was arranged on October 3. A nature trail and a film, 'Saving the Tiger' was followed by a discussion on Corporate Social Responsibility. The group was encouraged to conduct eco-friendly activities.

On October 4, a thoroughly enjoyable nature trail and slide show was conducted for about 250 underprivileged children of 8 to 12 years along with 28 teachers. The group was thrilled at the opportunity to visit and learn about the Park.

Drawing and quiz contests for school children were organised at NIC on October 5.

A unique 'Capacity Building Programme' for forest officers was conducted at the NIC on October 6. Mr. Isaac Kehimkar, PRO, BNHS led the group on Tulsi Lake Road, imparting scientific information and conservation values.

One of the many stakeholders in the conservation of SGNP are the thousands of morning walkers who enter the Park even before it is officially opened for the public. The Forest Dept wished to sensitize this group to the conservation needs of SGNP during their daily visits. The BNHS-NIC brought these two together on one platform. A free

flow of suggestions led to a desire to work together towards a better future of the National Park. Mr. Anand Bharati, DCF, SGNP personally led the group around Tulsi Lake. The Forest Dept has promised plant saplings on the Gandhi Tekdi and the morning walkers have taken responsibility to water them.

In the evening, a cultural group led by M. Vijendra Chavan performed a street play and cultural dance to conclude the Wildlife Week Programme at the main gate of the SGNP.

Ms. Vijaylaxmi Sheth, Chief Post Master General, Maharashtra and Goa inaugurated the Postal stamp exhibition held at Hornbill House from October 5-9, 2004. Speaking on the occasion, she acknowledged BNHS's association with the Postal Department in issuing stamps on India's wildlife. She stressed the need to make our youth aware of the importance of protecting nature, especially the rich biodiversity of India. Ms. Sheth felt that to highlight our rich natural heritage more such postal stamps should be issued.

The personal collections of Mr. Naresh Chaturvedi Curator, BNHS, Mr. H. Mama, Farrouque Shah and Mr. Saurabh Paranjpe, members of the Society were displayed.

The BNHS team was thus able to disseminate the message of nature conservation to more than 2500 people altogether. ■

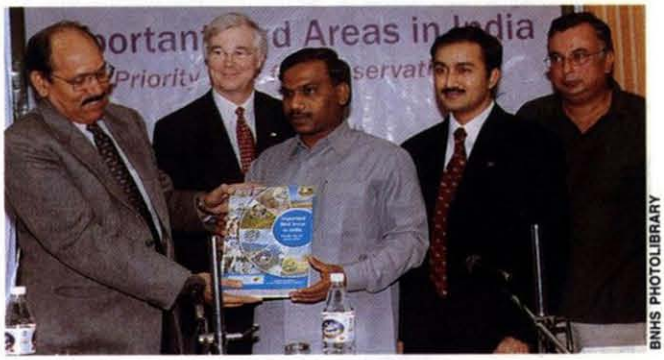
Important Bird Areas in India — a conservation initiative

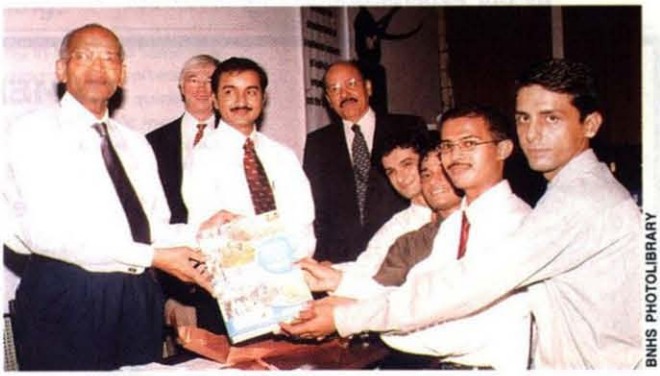
As part of the Bombay Natural History Society's conservation initiatives, a new book, IMPORTANT BIRD AREAS IN INDIA was released by the Hon'ble Union Minister of Environment and Forests, Govt of India, Mr. N. Raja, in New Delhi on November 4, 2004. In his speech the Hon'ble Minister said, "I strongly encourage everyone who is concerned for India to act on the analysis and recommendations so eloquently presented in this scientific publication. I look forward to seeing realistic action on the ground based on this valuable document and hope the Government will use it as a base for bird conservation in the country."

The book has information on 465 sites in India vital for bird conservation. It is a product of collaborative efforts of the Royal Society for the Protection of Birds, BirdLife International, Government of India, State Forest Departments and several NGOs with the BNHS. It is the first ever attempt to list all the possible sites in India that are internationally recognised as important sites for birds and biodiversity conservation.

The new publication is the result of five years' exhaustive work by the IBA team and a number of people under the leadership of Dr. Asad Rahmani. The data, which forms the core of the book, has been collected by amateur and professional ornithologists, bird watchers, conservationists, and forest officials across the country.

Out of 465 IBAs listed and surveyed, nearly half are presently not protected. The BNHS will work to advocate protection of these unprotected sites. Some are suitable for protected areas status and for others community protection will be sought.





Above (L-R): Dr. Asad R. Rahmani, Director, BNHS, Mr. Alistair Gammell, Director, Global Dept, RSPB, Mr. N. Raja Hon'ble Union Minister, Mr. Zafar-ul Islam Projects Manager IBA & IBCN, BNHS and Mr. Bikram Grewal in New Delhi during the release of the book

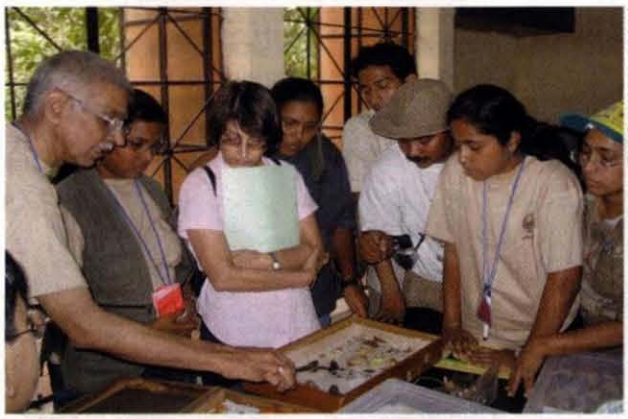
Below: Mr. B.G. Deshmukh, President, BNHS and the IBA team at the pre-release launch at Hornbill House

The book was also informally launched at Hornbill House by Mr. B.G. Deshmukh on Nov.ember 2, 2004, prior to the event at New Delhi. ■

Breakfast with butterflies

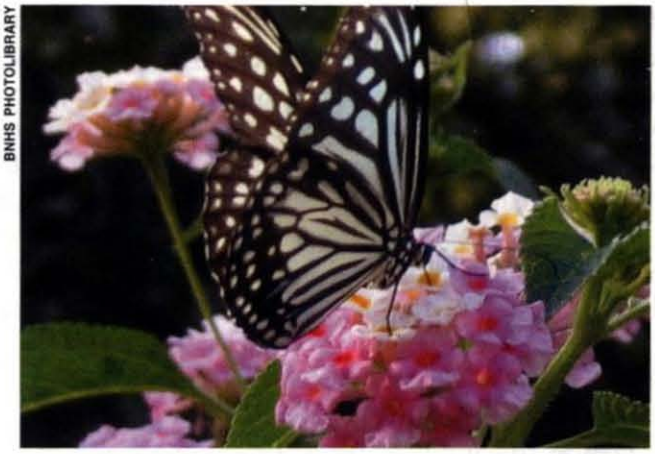
Out of 1,500 Indian species of butterflies, Mumbai has a share of 150 species. To celebrate this, the Bombay Natural History Society (BNHS) arranged a "breakfast with the butterflies" on October 23, 2004 at the BNHS-Conservation Education Centre, Goregaon, which was attended by 140 enthusiastic nature lovers. Each participant received a 'Butterfly Kit' containing relevant literature and gifts. The programme included a butterfly-watching trail followed by interactive indoor sessions, which included an illustrated talk on butterflies, specimen viewing of butterfly relatives, butterfly quiz, tips on gardening for butterflies, attracting butterflies with fruit as bait and meeting butterfly experts from the BNHS. The children were entertained with a special art corner, for face painting and butterfly craft. This exciting programme was followed by breakfast and distribution of educational material, souvenirs and prizes to the participants. The programme ended with a butterfly jingle and a slide show on "Ek Titli ki Kahani". The overwhelming response to this programme inspired us to conduct another one on November 7, attended by 42 people.

BNHS staff and volunteers of the several distance learning courses conducted by the BNHS helped make this programme a success. ■



BNHS PHOTOLIBRARY

A variety of information on butterflies was served by our experts during this breakfast



BNHS PHOTOLIBRARY

The Glassy Tiger is just one of 150 species of butterflies that we can see in our city

IN MEMORIAM

Limitless Ocean,
Where the restless wave
Undulates ever
Under and over
Their seething strife
Heaving and weaving
The changes of life

— Goethe's Faust

Please help those whose life has been devastated by the Cruel Sea.
Send your contribution to the
Prime Minister's National Relief Fund
Prime Minister's Office,
P.O. Box 5411,
New Delhi 110 011

An appeal from the Editors

Software that changes the way software is written.
For Tata, it's just the beginning.

Mastercraft,® by Tata, has revolutionised software writing in much the same way that automation revolutionised factory production. It's a unique set of software tools that automates the production of large software applications. Resulting in quicker delivery of projects, with a greater degree of accuracy. Thus saving innumerable man-hours. While achieving world-class productivity levels and quality standards. Helping take India to the forefront of the software industry. That's leveraging technology for a better life. As practised by 230,000 people at Tata everyday

TATA

Improving the quality of life

To know more, visit us at www.tatamastercraft.com

FCB•ULKA 210131B

Registered with the Registrar of Newspapers under **No. RN 35749/79**

Mr. Krishnamurthy joined the Adopt-a-Rare-Bird program to save the Imperial Eagle. You too can adopt an endangered bird for just Rs. 300. And for saving this bird, we will send you a personalised photo frame of the bird you have adopted.

ADOPT A RARE BIRD

Bombay Natural History Society

Draw cheques in favour of 'Bombay Natural History Society', write your name and the name of the bird you want to adopt behind it and drop them in the provided drop boxes or send them to Bombay Natural History Society, Hornbill House, Shaheed Bhagat Singh Road, Mumbai- 400 023, India.
For further details on how you can help call 91-22-22821811, visit http://www.bnhs.org or e-mail: bnhs@bom4.vsnl.net.in (Pic. Courtesy - Valery Moseikin)

LOWE BNHS 2 04